



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 170344

TO: Delia Ramirez
Location: 2d74 / 2c70
Art Unit: 1652
Wednesday, November 09, 2005

Case Serial Number: 09/371347

From: Noble Jarrell
Location: Biotech-Chem Library
Rem 1B71
Phone: 272-2556

Noble.jarrell@uspto.gov

Search Notes

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Db 440 CGGCATTTCTATGACACATCGCATGCGATGACTGTGTAGGTTTAGAACTTGTGTGAG 499
QY 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCGAGACAA 480
Db 500 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCGAGACAA 559
QY 481 GAGGAGATAAGTGGGCGCACTCCGGTGGCATCACCTGCGCATCCTTGAGGACAGACCTTGTG 540
Db 560 GAGGAGATAAGTGGGCGCACTCCGGTGGCATCACCTGCGCATCCTTGAGGACAGACCTTGTG 619
QY 541 AAGTCAGAGCTCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGCTCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
QY 601 AGAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 680 AGAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 739
QY 661 ATTGAAGACTTTGAGTCCTCACTTACCCTGTCGGTACCCCACTCTCAAGCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCCTCACTTACCCTGTCGGTACCCCACTCTCAAGCCTCTCTG 799
QY 721 AATATTCTCTGTTTACCCCCAGAAATATTTACAGTACATCTGCAGGAGTCTCTTGGCCAG 780
Db 800 AATATTCTCTGTTTACCCCCAGAAATATTTACAGTACATCTGCAGGAGTCTCTTGGCCAG 859
QY 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATTCAGTTTTTCAAGTGCCTTTCAGG 840
Db 860 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATTCAGTTTTTCAAGTGCCTTTCAGG 919
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTAGAAATGGACATT 900
Db 920 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTAGAAATGGACATT 979
QY 901 TCAATATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGGGTGATCTGCCCTAACGT 960
Db 980 TCAATATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGGGTGATCTGCCCTAACGT 1039
QY 961 GATTCGAGGTCAAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACTGC 1020
Db 1040 GATTCGAGGTCAAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACTGC 1099
QY 1021 GTCCCTTTGAAATAAAGCGACACACAAAGAAAGAGGAGTACCTTACCCAGCATATA 1080
Db 1100 GTCCCTTTGAAATAAAGCGACACACAAAGAAAGAGGAGTACCTTACCCAGCATATA 1159
QY 1081 CTGCGGGAGTGTCTCTCCAGTTCAATTTTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1160 CTGCGGGAGTGTCTCTCCAGTTCAATTTTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1219
QY 1141 AAAAAGGCATTTTGGAGCCCTTGTGGACTATACAGTGACAGTGTCTGAAAAGCGCAGG 1200
Db 1220 AAAAAGGCATTTTGGAGCCCTTGTGGACTATACAGTGACAGTGTCTGAAAAGCGCAGG 1279
QY 1201 CTACAGGAGCTGTGAGTAAACAAAGGGCAGCGGATTATAGCGCTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAAGGGCAGCGGATTATAGCGCTTGTACGAGATGCC 1339
QY 1261 TGTGCTGCTGTGTGGATCTCTCTCGCTTTCCCTTCTTGGCAGCCACCTCAAGTCTC 1320
Db 1340 TGTGCTGCTGTGTGGATCTCTCTCGCTTTCCCTTCTTGGCAGCCACCTCAAGTCTC 1399
QY 1321 CTGCTCGAATCATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAATCATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
QY 1381 TTTTACCCAGGAAGCTCATTTTGTCTTCAATTTGTGAAATTTCTGTCTACTGCGACA 1440
Db 1460 TTTTACCCAGGAAGCTCATTTTGTCTTCAATTTGTGAAATTTCTGTCTACTGCGACA 1519
QY 1441 ACAGAGGTTCTCGGAAAGGAGTATGTACAGGCTGGCCTTGTGTGTTGCTTCAGTT 1500
Db 1520 ACAGAGGTTCTCGGAAAGGAGTATGTACAGGCTGGCCTTGTGTGTTGCTTCAGTT 1579

QY 1501 CTTTCCAGCCAAACATACATGCATCCATGAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1560
Db 1580 CTTTCCAGCCAAACATACATGCATCCATGAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1639
QY 1561 TCCATCTCTCCTCGAACAACAATTTCTTTCCACTTACAGATGACCCCTCAATCCCATC 1620
Db 1640 TCCATCTCTCCTCGAACAACAATTTCTTTCCACTTACAGATGACCCCTCAATCCCATC 1699
QY 1621 ATAAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGGTTCTTACAAATAGAGAG 1680
Db 1700 ATAAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGGTTCTTACAAATAGAGAG 1759
QY 1681 AAATCTCCAGACACACCCAGATGGAATTTTGGAGCAATGTGTTTGGCTGC 1740
Db 1760 AAATCTCCAGACACACCCAGATGGAATTTTGGAGCAATGTGTTTGGCTGC 1819
QY 1741 AGGCATAAGGATAGGATTTATCTATTTCAGAAAAGAGCTCAGACATTTCCCTTAAGCATGG 1800
Db 1820 AGGCATAAGGATAGGATTTATCTATTTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1879
QY 1801 ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTTCTTGGGAGGAGGAAGCC 1860
Db 1880 ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTTCTTGGGAGGAGGAAGCC 1939
QY 1861 CCAGCAAAAGTATGTAACAAGACACATCCAGCTTCAAGCCAGCAGGTGGCGAATCTCTC 1920
Db 1940 CCAGCAAAAGTATGTAACAAGACACATCCAGCTTCAAGCCAGCAGGTGGCGAATCTCTC 1999
QY 1921 CTCCAGGAGAACGGCCATATTATGTGTGGAGATGCAAGAAATATGGCCAAAGGATGTA 1980
Db 2000 CTCCAGGAGAACGGCCATATTATGTGTGGAGATGCAAGAAATATGGCCAAAGGATGTA 2059
QY 1981 CATGATGCCCTTGTCCAAATATAAGCAAAAGAGTTGGAGTTGAAAAACTAGAACCAATG 2040
Db 2060 CATGATGCCCTTGTCCAAATATAAGCAAAAGAGTTGGAGTTGAAAAACTAGAACCAATG 2119
QY 2041 AAAACCTGGCCACTTTAAAAGAAAGAAACCCCTACCTCAGGATATTGGTCAATA 2097
Db 2120 AAAACCTGGCCACTTTAAAAGAAAGAAACCCCTACCTCAGGATATTGGTCAATA 2176

RESULT 2

US-09-949-016-4215
; Sequence 4215, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4215
; LENGTH: 3242
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4215

Query Match 99.8%; Score 2092.2; DB 4; Length 3242;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1 ATGAGAGGTTTCTGTCTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA 60
|||||

APPLICANT: Lacroix, Bruno
; TITLE OF INVENTION: 5' ESTs FOR SECRETED PROTEINS
; NUMBER OF SEQUENCES: 503
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson & Bear
; STREET: 501 West Broadway
; CITY: San Diego
; STATE: California
; COUNTRY: USA
; ZIP: 92101-3505
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: Win95
; SOFTWARE: Word
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/905,223
; FILING DATE:
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Israelsen, Ned A.
; REGISTRATION NUMBER: 29,655
; REFERENCE/DOCKET NUMBER:
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 235-8550
; TELEFAX: (619) 235-0176
; INFORMATION FOR SEQ ID NO: 71:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 390 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: DOUBLE
; TOPOLOGY: LINEAR
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Homo Sapiens
; TISSUE TYPE: Brain
; FEATURE:
; NAME/KEY: sig_peptide
; LOCATION: 289..357
; IDENTIFICATION METHOD: Von Heijne matrix
; OTHER INFORMATION: score 6.9
; OTHER INFORMATION: seq SL5LLASHSVSC/SN
US-08-905-223-71

Query Match 18.4%; Score 386.4; DB 3; Length 390;
Best Local Similarity 99.7%; Pred. No. 1.1e-122;
Matches 387; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 968 AGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGGCTCCTTT 1027
Db 1 AGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGGCTCCTTT 60
QY 1028 TGAATAAAGGCAGACACAAAGAAAGAGGAGCTACCTTACCCAGCATATACCTGCGG 1087
Db 61 TGAATAAAGGCAGACACAAAGAAAGAGGAGCTACCTTACCCAGCATATACCTGCGG 120
QY 1088 GATGTTCTCTCCAGTTCAATTTTACCTGTGCTTGAATCCGAGCAATTCCTAAAAG 1147
Db 121 GATGTTCTCTCCAGTTCAATTTTACCTGTGCTTGAATCCGAGCAATTCCTAAAAG 180
QY 1148 CATTTTTCGAGCCCTTGTGACTATACAGTACAGTGTGAAAGCGCAGGCTACAGG 1207
Db 181 CATTTTTCGAGCCCTTGTGACTATACAGTACAGTGTGAAAGCGCAGGCTACAGG 240
QY 1208 AGCTGTGCAGTAAACAAAGGGGAGCGGATPATAGCGCTTTTGTACGAGATGCTGTGCCT 1267
Db 241 AGCTGTGCAGTAAACAAAGGGGAGCGGATPATAGCGCTTTTGTACGAGATGCTGTGCCT 300
QY 1268 GCTGTGTGATCTCTCCCTGCTTCCCTTCTTCCAGCCACCACTCAGTCTCTCTGCTG 1327
Db 301 GCTGTGTGATCTCTCCCTGCTTCCCTTCTTCCAGCCACCACTCAGTCTCTCTGCTG 360
QY 1328 AACATCTTCTCTAACTTCAACCCAGACC 1355

Db 361 AACATCTTCTCTAACTTCAACCCAGACC 388
RESULT 4
US-09-949-016-150019
; Sequence 150019, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150019
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150019
Query Match 18.1%; Score 380.6; DB 4; Length 601;
Best Local Similarity 99.7%; Pred. No. 1.5e-120;
Matches 380; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 401 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 460
Db 178 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 237
QY 461 TTAGGTCAAGCAGACGACAAAGAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAT 520
Db 238 TTAGGTCAAGCAGACGACAAAGAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAT 297
QY 521 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTCCTACACATTGAATCTCAAGTCGAGCTTC 580
Db 298 CCTYGAGGACAGACCTTGTGAAGTCAGAGCTCCTACACATTGAATCTCAAGTCGAGCTTC 357
QY 581 TGAGATTTCATGATTCAGAAAGAGGATTCTGAGGTTTGAAGCAAAATGCAGTGAACA 640
Db 358 TGAGATTTCATGATTCAGAAAGAGGATTCTGAGGTTTGAAGCAAAATGCAGTGAACA 417
QY 641 GCAACCAATCCCAATGTTGTAATTGAAGACTTTTGAGTCCTCACTTACCCGTTGGTACCCC 700
Db 418 GCAACCAATCCCAATGTTGTAATTGAAGACTTTTGAGTCCTCACTTACCCGTTGGTACCCC 477
QY 701 CACTCTCACAAGCCTCTCTGAATATTCTGTTTACCCCCAGAAATTTTACAGGTACATC 760
Db 478 CACTCTCACAAGCCTCTCTGAATATTCTGTTTACCCCCAGAAATTTTACAGGTACATC 537
QY 761 TGCAGGAGTCTCTTGCCAGG 781
Db 538 TGCAGGAGTCTCTTGCCAGG 558
RESULT 5
US-09-949-016-15957
; Sequence 15957, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14

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; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15957
; LENGTH: 35916
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-15957

Query Match
Best Local Similarity 18.1%; Score 379.4; DB 4; Length 35916;
Matches 380; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGGTGGAGCGCTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT 460
Db 10781 GTTTAGAACTTGTGGTGGAGCGCTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT 10840

QY 461 TTAGGTCAAGCAGAGGACAAGAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCAT 520
Db 10841 TTAGGTCAAGCAGAGGACAAGAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCAT 10900

QY 521 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 580
Db 10901 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 10960

QY 581 TGAGATTTCGATGATTCAGAGGAGGAGGATTCAGGTTTGAAGCAAAATGCAAGTGAACA 640
Db 10961 TGAGATTTCGATGATTCAGAGGAGGAGGATTCAGGTTTGAAGCAAAATGCAAGTGAACA 11020

QY 641 GCAACCAATCCAAATGTTGAATTTGAAGACTTTGAGTCCTCACTACCCGTCGGTACCCC 700
Db 11021 GCAACCAATCCAAATGTTGAATTTGAAGACTTTGAGTCCTCACTACCCGTCGGTACCCC 11080

QY 701 CACTCTCAAGCCCTCTCTGAATATTCCTGGTTTACCCCAAGATATTTACAGGTACATC 760
Db 11081 CACTCTCAAGCCCTCTCTGAATATTCCTGGTTTACCCCAAGATATTTACAGGTACATC 11140

QY 761 TCAGAGAGTCTCTGGCCAGG 781
Db 11141 TCAGAGAGTCTCTGGCCAGG 11161

RESULT 6
US-09-949-016-150020
; Sequence 150020, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150020
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150020

Query Match
Best Local Similarity 9.1%; Score 190.4; DB 4; Length 601;
Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1369 AGCTCAAGTTTATTTTACCCAGGAAAGCTCCATTTTGTCTTCAACATTGTGGAATTCG 1428
Db 18 AGCTCAAGTTTATTTTACCCAGGAAAGCTCCATTTTGTCTTCAACATTGTGGAATTCG 77

QY 1429 TCTACTGCCACACAGAGGTTCTCGGAAGGGAGTGTACAGGCTGGCTGGCTTGTG 1488
Db 78 TCTACTGCCACACAGAGGTTCTCGGAAGGGAGTGTACAGGCTGGCTGGCTTGTG 137

QY 1489 GTTGCTTCAGTTCTTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTG 1548
Db 138 GTTGCTTCAGTTCTTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTG 197
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; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15957
; LENGTH: 35916
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-15957

Query Match
Best Local Similarity 18.1%; Score 379.4; DB 4; Length 35916;
Matches 380; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGGTGGAGCGCTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT 460
Db 10781 GTTTAGAACTTGTGGTGGAGCGCTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT 10840

QY 461 TTAGGTCAAGCAGAGGACAAGAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCAT 520
Db 10841 TTAGGTCAAGCAGAGGACAAGAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCAT 10900

QY 521 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 580
Db 10901 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 10960

QY 581 TGAGATTTCGATGATTCAGAGGAGGAGGATTCAGGTTTGAAGCAAAATGCAAGTGAACA 640
Db 10961 TGAGATTTCGATGATTCAGAGGAGGAGGATTCAGGTTTGAAGCAAAATGCAAGTGAACA 11020

QY 641 GCAACCAATCCAAATGTTGAATTTGAAGACTTTGAGTCCTCACTACCCGTCGGTACCCC 700
Db 11021 GCAACCAATCCAAATGTTGAATTTGAAGACTTTGAGTCCTCACTACCCGTCGGTACCCC 11080

QY 701 CACTCTCAAGCCCTCTCTGAATATTCCTGGTTTACCCCAAGATATTTACAGGTACATC 760
Db 11081 CACTCTCAAGCCCTCTCTGAATATTCCTGGTTTACCCCAAGATATTTACAGGTACATC 11140

QY 761 TCAGAGAGTCTCTGGCCAGG 781
Db 11141 TCAGAGAGTCTCTGGCCAGG 11161

RESULT 6
US-09-949-016-150020
; Sequence 150020, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150020
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150020

Query Match
Best Local Similarity 18.1%; Score 379; DB 4; Length 601;
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; Patent No. 682888
; GENERAL INFORMATION:
; APPLICANT: Loring, Jeanne F.
; APPLICANT: Tingley, Debra W.
; APPLICANT: Edwards, Carla M.
; TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE
; FILE REFERENCE: PA-0024 US
; CURRENT APPLICATION NUMBER: US/09/566,921
; CURRENT FILING DATE: 2000-05-05
; NUMBER OF SEQ ID NOS: 138
; SOFTWARE: PERL Program
; SEQ ID NO 88
; LENGTH: 2475
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6682888 255828.26
; NAME/KEY: unsure
; LOCATION: 1001, 1011
; OTHER INFORMATION: a, t, c, g, or other
US-09-566-921-88

Query Match
Best Local Similarity 8.3%; Score 174.4; DB 4; Length 2475;
Matches 178; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 510 ATCACTGCTATCTTGGAGCAGACCTTGTGAAGTCAGAGCTGCTACACATTGAAATCTCA 569
DB 1 ATCACTGCTATCTTGGAGCAGACCTTGTGAAGTCAGAGCTGCTACACATTGAAATCTCA 60
QY 570 AGTCGAGCTTCTGAGATTCGATTCGATTCAGGAAGAAAGGATTCGAGGTTTGAAGCAAAA 629
DB 61 AGTCGAGCTTCTGAGATTCGATTCGATTCAGGAAGAAAGGATTCGAGGTTTGAAGCAAAA 120
QY 630 TGCAGTGAACAGCAACCAATCCATGTTGTAATTGAAGACTTTGAGTCTCTACTACCG 689
DB 121 TGCAGTGAACAGCAACCAATCCATGTTGTAATTGAAGACTTTGAGTCTCTACGGATCTC 180
QY 690 TTCC 693
DB 181 TTCC 184

RESULT 12
US-09-949-016-150030
; Sequence 150030, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150030
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150031

Query Match
Best Local Similarity 7.4%; Score 154.8; DB 4; Length 601;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 899 TTCAAATACAGACTTTTCTATCAGCTGGAGATGCCCTTACAGCGTGATCTGCCCTAAACA 958
DB 151 TCTAGAATACAGACTTTTCTATCAGCTGGAGATGCCCTTACAGCGTGATCTGCCCTAAACA 210
QY 959 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTCCAGCTTCAAGATAAAAGAGAGCACT 1018
DB 211 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTCCAGCTTCAAGATAAAAGAGAGCACT 270
QY 1019 GCGTCTCTTTGAAAAATAAAGGCAGACACAAAGAAGAAAGG 1058
DB 271 GCGTCTCTTTGAAAAATAAAGGCAGACACAAAGAAGAAAGG 310

RESULT 13
US-09-949-016-150031
; Sequence 150031, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150031
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150031

Query Match
Best Local Similarity 97.5%; Pred. No. 2.6e-42;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 899 TTCAAATACAGACTTTTCTATCAGCTGGAGATGCCCTTACAGCGTGATCTGCCCTAAACA 958
DB 151 TCTAGAATACAGACTTTTCTATCAGCTGGAGATGCCCTTACAGCGTGATCTGCCCTAAACA 210
QY 959 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTCCAGCTTCAAGATAAAAGAGAGCACT 1018
DB 211 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTCCAGCTTCAAGATAAAAGAGAGCACT 270
QY 1019 GCGTCTCTTTGAAAAATAAAGGCAGACACAAAGAAGAAAGG 1058
DB 271 GCGTCTCTTTGAAAAATAAAGGCAGACACAAAGAAGAAAGG 310

RESULT 14
US-09-471-276-495
; Sequence 495, Application US/09471276
; Patent No. 6822072
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6822072
; FILE REFERENCE: GENSET.025CPI
; CURRENT APPLICATION NUMBER: US/09/471,276
; CURRENT FILING DATE: 1999-12-21
; EARLIER APPLICATION NUMBER: 09/057,719
; EARLIER FILING DATE: 1998-04-09
; EARLIER APPLICATION NUMBER: 09/069,047
; EARLIER FILING DATE: 1998-04-28
; EARLIER APPLICATION NUMBER: PCT/IB99/00712
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; EARLIER FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1622
; SOFTWARE: Patent.pm
; SEQ ID NO 495
; LENGTH: 244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 70..243
; NAME/KEY: sig_peptide
; LOCATION: 70..114
; OTHER INFORMATION: Von Heijne matrix
; OTHER INFORMATION: score 4.4000009536743
; OTHER INFORMATION: seq RELLLYATQGGQA/KA
US-09-471-276-495

Query Match 6.2%; Score 130.8; DB 4; Length 244;
Best Local Similarity 88.1%; Pred. No. 2.6e-34;
Matches 141; Conservative 1; Mismatches 18; Indels 0; Gaps 0;

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DB |||||||
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; Sequence 150007, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150007
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150007

Query Match 6.1%; Score 128.6; DB 4; Length 601;
Best Local Similarity 99.2%; Pred. No. 3.1e-33;
Matches 128; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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DB |||||||
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QY 121 TCCGATAAG 129
DB |||||||

Db 356 TCCGATAAG 364

Search completed: November 8, 2005, 17:00:48
Job time : 237.757 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 16:35:10 ; Search time 1123.15 Seconds
(without alignments)
15440.336 Million cell updates/sec

Title: US-09-371-347A-1

Perfect score: 2097

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Scoring table:

IDENTITY NUC

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Searched: 9794790 seqs, 4134909567 residues

Total number of hits satisfying chosen parameters: 19589580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications_NA.*

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- 18: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
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- 23: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
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- 26: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
- 27: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
- 28: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	2097	100.0	3259	24	US-10-450-763-874
5	2097	100.0	3259	26	US-11-119-096-24

6	2095.4	99.9	2097	10	US-09-371-347-41	Sequence 41, Appl
7	2095.4	99.9	2097	10	US-09-371-347-43	Sequence 43, Appl
8	2095.4	99.9	2097	26	US-11-119-096-41	Sequence 41, Appl
9	2095.4	99.9	2097	26	US-11-119-096-41	Sequence 43, Appl
10	2088.6	99.6	3256	22	US-10-741-600-692	Sequence 692, App
11	2088.6	99.6	3274	22	US-10-741-600-693	Sequence 693, App
12	2081	99.2	2094	10	US-09-371-347-45	Sequence 45, Appl
13	2081	99.2	2094	10	US-11-119-096-45	Sequence 45, Appl
14	2079	99.1	2093	10	US-09-371-347-47	Sequence 47, Appl
15	2079	99.1	2093	26	US-11-119-096-47	Sequence 47, Appl
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17	379.8	18.1	591	17	US-10-029-386-6369	Sequence 6369, Ap
18	377.8	18.0	591	17	US-10-029-386-6369	Sequence 1735, Ap
19	377.4	18.0	379	17	US-10-029-386-40100	Sequence 20100, A
20	375.8	17.9	379	17	US-10-029-386-40100	Sequence 15435, A
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22	284.8	13.6	583	13	US-09-925-065A-827971	Sequence 827971,
23	275.8	13.2	503	24	US-10-450-763-873	Sequence 873, App
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38	200.6	9.6	201	22	US-10-741-600-15612	Sequence 15612, A
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ALIGNMENTS

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US-09-371-347-1
; Sequence 1, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE;
; TITLE OF INVENTION: CLONING AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-1

Query Match 100.0%; Score 2097; DB 10; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 2
US-11-119-096-1
; Sequence 1, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:

APPLICANT: Gravel, Roy A.,
APPLICANT: Rozen, Rima
APPLICANT: Leclerc, Daniel
APPLICANT: Wilson, Aaron
APPLICANT: Rosenblatt, David
TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
FILE REFERENCE: 50004/003005
CURRENT APPLICATION NUMBER: US/11/119,096
CURRENT FILING DATE: 2005-04-29
PRIOR APPLICATION NUMBER: 09/487,841
PRIOR FILING DATE: 2000-01-19
PRIOR APPLICATION NUMBER: 09/371,347
PRIOR FILING DATE: 1999-08-10
PRIOR APPLICATION NUMBER: 09/232,028
PRIOR FILING DATE: 1999-01-15
PRIOR APPLICATION NUMBER: 60/071,622
PRIOR FILING DATE: 1998-01-16
NUMBER OF SEQ ID NOS: 63
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 1
LENGTH: 2097
TYPE: DNA
ORGANISM: Homo sapiens
US-11-119-096-1

Query Match 100.0%; Score 2097; DB 26; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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721 AATATTCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGAGTCTCTTGGCCAG 780
781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTCAAG 840
781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTCAAG 840
841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGCA 900
841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGCA 900
901 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTCCAGGTGATCTGCCCTAACAGT 960
901 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTCCAGGTGATCTGCCCTAACAGT 960
961 GATTCTGAGGTACAAAGCCTACTTCCAAAGACTGCGAGTTGAAGATAAAAGAGAGCACTGC 1020
961 GATTCTGAGGTACAAAGCCTACTTCCAAAGACTGCGAGTTGAAGATAAAAGAGAGCACTGC 1020
1021 GTCTTTTGAATAAAGCAGACACAAAGAGAGAGCTTACCTTACCCAGCATATA 1080
1021 GTCTTTTGAATAAAGCAGACACAAAGAGAGAGCTTACCTTACCCAGCATATA 1080
1081 CTGCGGGAGTCTCTCCAGTTCAATTTTACCTGGTGTCTGAAATCCGAGCAATTCCT 1140
1081 CTGCGGGAGTCTCTCCAGTTCAATTTTACCTGGTGTCTGAAATCCGAGCAATTCCT 1140
1141 AAAAAGGCAATTTTGCAGCCCTTGTGAGCTATACAGTGCAGAGTCTGAAAAAGCGCAGG 1200
1141 AAAAAGGCAATTTTGCAGCCCTTGTGAGCTATACAGTGCAGAGTCTGAAAAAGCGCAGG 1200
1201 CTACAGGAGCTGTGAGTAAACAAAGGGGAGCGGATATAGCGGCTTGTACAGATGCC 1260
1201 CTACAGGAGCTGTGAGTAAACAAAGGGGAGCGGATATAGCGGCTTGTACAGATGCC 1260
1261 TGTGCTGCTGTTGGATCTCTCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1320
1261 TGTGCTGCTGTTGGATCTCTCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1320
1321 CTGCTCGAACTCTTCTTAACTTCAACCCAGACCATATTTCTGCTGCAAGCTCAAGTTTA 1380
1321 CTGCTCGAACTCTTCTTAACTTCAACCCAGACCATATTTCTGCTGCAAGCTCAAGTTTA 1380
1381 TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1381 TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1441 ACAGAGTTCTGCGGAGGAGTATGTACAGGCTGCTGCTCTCTCTCTCTCTCTCTCTCTCT 1500
1441 ACAGAGTTCTGCGGAGGAGTATGTACAGGCTGCTGCTCTCTCTCTCTCTCTCTCTCTCT 1500
1501 CTTTCAGCAAAACATACATCATCCATGAAGACAGCGGAAAGCCCTGGCTCCTTAAGATA 1560
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1621 ATAAATGGGTGCTCAGGAAACCGGCAATAGCCCGTTTATTTGGGTTCTTACAAATAGAG 1680
1621 ATAAATGGGTGCTCAGGAAACCGGCAATAGCCCGTTTATTTGGGTTCTTACAAATAGAG 1680
1681 AACTCCAAAGAACCAACCCAGATGGAATTTTGGAGCAATTTTGGTGTGTTTGTGCTGC 1740
1681 AACTCCAAAGAACCAACCCAGATGGAATTTTGGAGCAATTTTGGTGTGTTTGTGCTGC 1740

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QY 1741 AGGCATAAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAGCATGG 1800
Db 1741 AGGCATAAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAGCATGG 1800
QY 1801 ATCTTAACTCATCTAAAGGTTTCTCTCTCAAGAGATGCTCCCTGTTGGGAGGAGGAAGCC 1860
Db 1801 ATCTTAACTCACTAAAGGTTTCTCTCTCAAGAGATGCTCCCTGTTGGGAGGAGGAAGCC 1860
QY 1861 CCAGCAAAAGTATGTAACAAGACATCCAGCTTCATGGCCAGCAGTGGCGAGATCCCTC 1920
Db 1861 CCAGCAAAAGTATGTAACAAGACATCCAGCTTCATGGCCAGCAGTGGCGAGATCCCTC 1920
QY 1921 CTCACGAGAACGGCCATATTTATGTGTGGAGATGCAAGAATATGGCCAGGATGTA 1980
Db 1921 CTCACGAGAACGGCCATATTTATGTGTGGAGATGCAAGAATATGGCCAGGATGTA 1980
QY 1981 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAAAATAGAAAGCAATG 2040
Db 1981 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAAAATAGAAAGCAATG 2040
QY 2041 AAAACCTCGCCACTTTAAAGAAAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2097
Db 2041 AAAACCTCGCCACTTTAAAGAAAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2097

RESULT 3
US-09-371-347-24
; Sequence 24, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq For Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-24

Query Match 100.0%; Score 2097; DB 10; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGAGCAAGGCGCATCGCAGAA 60
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QY 61 GAAATGTGTGAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACGTGTATTAGTAA 120
Db 140 GAAATGTGTGAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACGTGTATTAGTAA 199
QY 121 TCCGATAAGTATGACCTTAAACCGAAACAGCTCCTCTGTTGTTGTTTCTACACG 180
Db 200 TCCGATAAGTATGACCTTAAACCGAAACAGCTCCTCTGTTGTTGTTTCTACACG 259
QY 181 GGCACCGGAGACCCACCGACACAGCCGCAAGTTGTTAAAGAAATACAGAACCAACA 240
Db 260 GGCACCGGAGACCCACCGACACAGCCGCAAGTTGTTAAAGAAATACAGAACCAACA 319
QY 241 CTGCCGGTGTGATTTCTTTGCTACCTGCGGTATGGGTCTCGGTGATTCAGAA 300
Db 320 CTGCCGGTGTGATTTCTTTGCTACCTGCGGTATGGGTCTCGGTGATTCAGAA 379
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Db 380 TACACCTACTTTTGCATGGGGAGAGATAATTGATTAACGACTTCAAGAGCTTGGAGCC 439
QY 361 CGGCATTTCTATGACACATGACATGACATGACTGTGTAGGTTTAAAGCTTGTGGTTGAG 420
Db 440 CGGCATTTCTATGACACATGACATGACATGACTGTGTAGGTTTAAAGCTTGTGGTTGAG 499
QY 421 CGGTGGAATGCTGGAATCTTGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
Db 500 CGGTGGAATGCTGGAATCTTGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 559
QY 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCACTCTTGAGGACAGACCTTGG 540
Db 560 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCACTCTTGAGGACAGACCTTGG 619
QY 541 AAGTCAGAGCTCTACACATTCGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGCTCTACACATTCGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
QY 601 AGAAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAAACAGCAACCAATCCAATGTTGTA 660
Db 680 AGAAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAAACAGCAACCAATCCAATGTTGTA 739
QY 661 ATTTGAGACTTTGAGTCTCCTACTTACCGTTCGTTACCCCACTCTCACAAGCCTCTCTG 720
Db 740 ATTTGAGACTTTGAGTCTCCTACTTACCGTTCGTTACCCCACTCTCACAAGCCTCTCTG 799
QY 721 AATATTTCTGGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 780
Db 800 AATATTTCTGGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 859
QY 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 840
Db 860 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 919
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAGCACTCTCTGTTAGAAATGGACAT 900
Db 920 GCAGTTCAACTTACTACGAATGATGCCATAAAGCACTCTCTGTTAGAAATGGACAT 979
QY 901 TCAAAATACAGACTTTTCTTATCAGCCTGGAGATGCTTCAGCGTGTATCTGCCCTAACAG 960
Db 980 TCAAAATACAGACTTTTCTTATCAGCCTGGAGATGCTTCAGCGTGTATCTGCCCTAACAG 1039
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Db 1040 GATTTGAGGTACAAAGCCCTACTCAGAGCTGAGCTTGAAGATAAAGAGAGCACTGC 1099
QY 1021 GTCCCTTTGAAATAAAGGCAGACACAAAGAGAAAGGAGCTACCTTACCCAGCATATA 1080
Db 1100 GTCCCTTTGAAATAAAGGCAGACACAAAGAGAAAGGAGCTACCTTACCCAGCATATA 1159
QY 1081 CTGCGGGATGTTCTCTCCAGTTTCATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
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Db 1220 AAAAAGGCAATTTTGGCAGCCCTTGTGACTATACAGTGACAGTCTGAAAAGCGCAGG 1279
QY 1201 CTACAGGAGCTGTCAGTAAACAAGGGCAGCCGATTAATAGCGCTTCTGACGATGCC 1260
Db 1280 CTACAGGAGCTGTCAGTAAACAAGGGCAGCCGATTAATAGCGCTTCTGACGATGCC 1339
QY 1261 TGTGCTGCTGTGTGGATCTCTCTCGCTTTCCCTTTTGGCAGCCAGCTCAGTCTC 1320
Db 1340 TGTGCTGCTGTGTGGATCTCTCTCGCTTTCCCTTTTGGCAGCCAGCTCAGTCTC 1399
QY 1321 CTGCTCGAATCTTCTTAAATCTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAATCTTCTTAAATCTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
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1381 TTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1460 TTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
1441 ACAGAGTTTCTCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTCCTCAGTT 1500
1520 ACAGAGTTTCTCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTCCTCAGTT 1579
1501 CTTAGCCAAACATACATGCATCCCATGAAGACAGCGGGAAGCCCTGGCTCCTAAGATA 1560
1580 CTTAGCCAAACATACATGCATCCCATGAAGACAGCGGGAAGCCCTGGCTCCTAAGATA 1639
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1621 ATAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTGGGTTCTTCAACATAGAGAG 1680
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1760 AAATCCAAAGAACAAACACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
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1801 ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTCTTGGGAGGAGGAGGCC 1860
1880 ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTCTTGGGAGGAGGAGGCC 1939
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1940 CCAGCAAGATGTATCAAGAACCAACATCCAGCTTTCATGGCCAGCAGGTGGCGGAATCCTC 1999
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2000 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGCCCAGGATGTA 2059
1981 CATGATGCCCTGTGCATAATATAGCAAGAGGTTGGAGTTGCAAAACTAGAACCAATG 2040
2060 CATGATGCCCTGTGCATAATATAGCAAGAGGTTGGAGTTGCAAAACTAGAACCAATG 2119
2041 AAAACCTCGCCACTTTAAAGAAAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2097
2120 AAAACCTCGCCACTTTAAAGAAAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2176

RESULT 4
US-10-450-763-874
; Sequence 874, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 874
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIMILAR

; LOCATION: (80)...(2173)
; OTHER INFORMATION: 100% homologous to Homo sapiens methionine synthase
; OTHER INFORMATION: reductase, accession number AF025794, Smith-Waterman Score=3624.
US-10-450-763-874

Query Match 100.0%; Score 2097; DB 24; Length 3259;

Best Local Similarity 100.0%; Pred. No. 0;
Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGGAGGTTTCTGTACTATATCTACACAGCAGGAGCAGCAAGGCCATCGCAGAA 60
DB 80 ATGAGGAGGTTTCTGTACTATATCTACACAGCAGGAGCAGCAAGGCCATCGCAGAA 139
QY 61 GAAATGTGTAGCAAGCTGTGTATCATGGATTTTCTGAGATCTTCTCATTGTATTAGTAA 120
DB 140 GAAATGTGTAGCAAGCTGTGTATCATGGATTTTCTGAGATCTTCTCATTGTATTAGTAA 199
QY 121 TCCGATATAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTGTGTCTTCTACACG 180
DB 200 TCCGATATAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTGTGTCTTCTACACG 259
QY 181 GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
DB 260 GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
QY 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTACTGGGTCTCGGTGATTGAGAA 300
DB 320 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTACTGGGTCTCGGTGATTGAGAA 379
QY 301 TACACCTACTTTGCAATGGGGGGAAGATTAATGTATAACGACTTCAAGAGCTTGAGGC 360
DB 380 TACACCTACTTTGCAATGGGGGGAAGATTAATGTATAACGACTTCAAGAGCTTGAGGC 439
QY 361 CGGCATTTCTATGACACTGGACATCAGATGACTGTAGTGTAGTTTGAACCTTGTGGTTGAG 420
DB 440 CGGCATTTCTATGACACTGGACATGCAATGACTGTAGTGTAGTTTGAACCTTGTGGTTGAG 499
QY 421 CGGTGGATTTGTGGACTCTGGCCAGCCCTCAGAAAAGCAATTTTAGGTCAAGCAGAGACAA 480
DB 500 CGGTGGATTTGTGGACTCTGGCCAGCCCTCAGAAAAGCAATTTTAGGTCAAGCAGAGACAA 559
QY 481 GAGGAGATAGTGGGCGACTCCCGTGGCATCACCTGCATCCTTGAGGACAGACCTTGTG 540
DB 560 GAGGAGATAGTGGGCGACTCCCGTGGCATCACCTGCATCCTTGAGGACAGACCTTGTG 619
QY 541 AAGTCAGAGCTGCTACACATTCGAATCTCAAGTCGAGCTTCTCAGATTCGATGATTGAGAA 600
DB 620 AAGTCAGAGCTGCTACACATTCGAATCTCAAGTCGAGCTTCTCAGATTCGATGATTGAGAA 679
QY 601 AGAAAGGATTTGTAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
DB 680 AGAAAGGATTTGTAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 739
QY 661 ATTGAAGCTTTGAGTCTCTACCTTACCGTTCCGTTACCCCACTCTCACAAGCCTCTCTG 720
DB 740 ATTGAAGCTTTGAGTCTCTACCTTACCGTTCCGTTACCCCACTCTCACAAGCCTCTCTG 799
QY 721 AATATTTCTGGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 780
DB 800 AATATTTCTGGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 859
QY 781 GAGGAAAGCCAAAGTATCTGTGATCTTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 840
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DB 1160 CTGCGGGATGTTCTCTCAGTTCATTTTACCTGGTGTTGGAATCCGAGCAATTCCT 1219
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DB 1460 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGCTACTGCCACA 1519
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QY 1501 CTTTACGCCAAACATACATGATGCCATGAAAGAGAGCGGAAAGCCCTGCTCTTAAGATA 1560
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DB 1640 TCCATCTCTCCTCGAAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCACATC 1699
QY 1621 ATATGGTGGTCCAGAACCGGCATAGCCCGTTTATTTGGGTTCTTCAACATACAGAG 1680
DB 1700 ATATGGTGGTCCAGAACCGGCATAGCCCGTTTATTTGGGTTCTTCAACATACAGAG 1759
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DB 1820 AGSCATAAGGATAGGGATATCTATTTAGAAAAAGAGCTCAGACATTTTCCCTTAAGCATGGG 1879
QY 1801 ATCTTAACTCATCTTAAAGGTTTCCCTTCTCAAGAGATGCTCCTGTGGGGAGGAGAGCC 1860
DB 1880 ATCTTAACTCATCTTAAAGGTTTCCCTTCTCAAGAGATGCTCCTGTGGGGAGGAGAGCC 1939
QY 1861 CCAGCAAGATGATGTACAGAACACATCCAGCTTTCATGGCCAGCAGGTGGCGAGAACTCTC 1920
DB 1940 CCAGCAAGATGATGTACAGAACACATCCAGCTTTCATGGCCAGCAGGTGGCGAGAACTCTC 1999
QY 1921 CTCAGGAGAACCGGCATATTTATGTGTGGAGATGCAAAAGAAATATGGCCAAAGGATGTA 1980
DB 2000 CTCAGGAGAACCGGCATATTTATGTGTGGAGATGCAAAAGAAATATGGCCAAAGGATGTA 2059
QY 1981 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2040
DB 2060 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2119
QY 2041 AAAACCTTGCCCACTTTAAAGAAAGAAAAACGCTACCTTCAGGATATTTTGGTCATAA 2097

DB 2120 AAAACCTTGCCCACTTTAAAGAAAGAAAAACCTACCTTCAGGATATTTTGGTCATAA 2176
RESULT 5
US-11-119-096-24
; Sequence 24, Application US/111119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-24

Query Match 100.0%; Score 2097; DB 26; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAAAGCCATCGCAGAA 60
DB 80 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAAAGCCATCGCAGAA 139
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DB 140 GAAATGTGTGACGACGCTGTGTACATGATTTCTGACAGATCTTCACTGTATTAGTGAA 199
QY 121 TCCGATAAGTATGACCTATAAAACCCGAAACAGCTCCTCTTGTGTTGTTCTACACAG 180
DB 200 TCCGATAAGTATGACCTATAAAACCCGAAACAGCTCCTCTTGTGTTGTTCTACACAG 259
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DB 260 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTTAAGGAAATACAGAACCAACA 319
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DB 380 TACACCTACTTTTGGCAATGGGGGAGATTAATGTATAAACGACTTCAAGAGCTTGGAGCC 439
QY 361 CGGCATTTCTATGACACTGGAATGATGATGATGATGATGATGATGATGATGATGATGATG 420
DB 440 CGGCATTTCTATGACACTGGAATGATGATGATGATGATGATGATGATGATGATGATGATG 499
QY 421 CGGTGATTTGCTGGACTCTGGCCAGCCCTCAGNAAGCATTTTAGGTCNAGCAGAGCAAA 480
DB 500 CGGTGATTTGCTGGACTCTGGCCAGCCCTCAGNAAGCATTTTAGGTCNAGCAGAGCAAA 559
QY 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCGATCCTTTGAGGACAGACCTTGTG 540

560 Db GAGGAGATAGTGGGCGCACTCCGCGTGGGCATCACCTGCATCTTGGAGCAGACCTTGTG 619
541 QY AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTTGATGATTCAGGA 600
620 Db AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTTGATGATTCAGGA 679
601 QY AGAAGAGATTTGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATTTCAATTTGTA 660
680 Db AGAAGAGATTTGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATTTCAATTTGTA 739
661 QY ATTGAAGACTTTGAGTCTCCTACCTTACCTTACCGTTCCGTTACCCCACTCTCACAGCCCTCTCTG 720
740 Db ATTGAAGACTTTGAGTCTCCTACCTTACCTTACCGTTCCGTTACCCCACTCTCACAGCCCTCTCTG 799
721 QY AATATTTCTGCTGTTTACCCCGCAATATTTACAGGTACATCTCGAGGAGTCTCTCGGCCAG 780
800 Db AATATTTCTGCTGTTTACCCCGCAATATTTACAGGTACATCTCGAGGAGTCTCTCGGCCAG 859
781 QY GAGGAAAGCCAAAGTATCTGTGATCTCGAGATCCAGTATTTTCAAGTGCCTTCAAGTTCGACATT 840
860 Db GAGGAAAGCCAAAGTATCTGTGATCTCGAGATCCAGTATTTTCAAGTGCCTTCAAGTTCGACATT 919
841 QY GCAGTTCAACTTACTACGATATGCTGATGCTTCAAGTGCCTTCAAGTGCCTTCAAGTTCGACATT 900
920 Db GCAGTTCAACTTACTACGATATGCTGATGCTTCAAGTGCCTTCAAGTGCCTTCAAGTTCGACATT 979
901 QY TCAATATACAGATCTTTCTCAGCTGAGATGCTTCAAGTGCCTTCAAGTGCCTTCAAGTTCGACATT 960
980 Db TCAATATACAGATCTTTCTCAGCTGAGATGCTTCAAGTGCCTTCAAGTGCCTTCAAGTTCGACATT 1039
961 QY GATCTGAGGTTCAAGGCTTCTCAGGATCTTCAAGGATCTTCAAGGATCTTCAAGGATCTTCAAGG 1020
1040 Db GATCTGAGGTTCAAGGCTTCTCAGGATCTTCAAGGATCTTCAAGGATCTTCAAGGATCTTCAAGG 1099
1021 QY GTCTCTTGAATTAAGGCGACACAAAGAGAAAGAGCTACCTTACCCCGCAGCATATA 1080
1100 Db GTCTCTTGAATTAAGGCGACACAAAGAGAAAGAGCTACCTTACCCCGCAGCATATA 1159
1081 QY CTGCGGGATGTTCTCTCAGTTCATTTTCTGCTGCTTGAATTCGAGCAATTCCT 1140
1160 Db CTGCGGGATGTTCTCTCAGTTCATTTTCTGCTGCTTGAATTCGAGCAATTCCT 1219
1141 QY AAAAAAGGCAATTTTGGAGCCCTTGTGACTATACAGTGCAGTGTCTGAAAGGCGCAGG 1200
1220 Db AAAAAAGGCAATTTTGGAGCCCTTGTGACTATACAGTGCAGTGTCTGAAAGGCGCAGG 1279
1201 QY CTACAGGAGCTGTGAGTAAACAAAGGGGAGCGGATATAGCGGCTTTGTAGAGATGCC 1260
1280 Db CTACAGGAGCTGTGAGTAAACAAAGGGGAGCGGATATAGCGGCTTTGTAGAGATGCC 1339
1261 QY TGTGCTGCTGTTGGATCTCTCTCTGCTTCTGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1320
1340 Db TGTGCTGCTGTTGGATCTCTCTCTGCTTCTGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1399
1321 QY CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTTGCGAGCTCAAGTTTA 1380
1400 Db CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTTGCGAGCTCAAGTTTA 1459
1381 QY TTTTACCCAGGAAGCTCAATTTGCTTCAACATTTGGAATTTCTGCTACTGCGACA 1440
1460 Db TTTTACCCAGGAAGCTCAATTTGCTTCAACATTTGGAATTTCTGCTACTGCGACA 1519
1441 QY ACAGAGGTTCTCGGAAGGAGTATGTACAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1500
1520 Db ACAGAGGTTCTCGGAAGGAGTATGTACAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1579
1501 QY CTTTACGCCAAACATACATGATCCCATGAAGCAGCGGGAAGCCCTGCTCTTAAGATA 1560
1580 Db CTTTACGCCAAACATACATGATCCCATGAAGCAGCGGGAAGCCCTGCTCTTAAGATA 1639
1561 QY TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGAGCCCTTCAATTCGCCATTC 1620

1640 Db TCCATCTCTCTCGAACAACAAATTTCTTCACTTACAGATGAGCCCTCAATTCGCCATC 1699
1621 QY ATAATGTGGGTCCAGGAACCGGCATAGCCCGCTTTATTTGGGTTCTTACAAATAGAGAG 1680
1700 Db ATAATGTGGGTCCAGGAACCGGCATAGCCCGCTTTATTTGGGTTCTTACAAATAGAGAG 1759
1681 QY AAATCTCAAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
1760 Db AAATCTCAAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
1741 QY AGGCATAAGGATAGGATTTCTTCTAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
1820 Db AGGCATAAGGATAGGATTTCTTCTAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1879
1801 QY ATCTTAACTCATTTAAAGGTTTCTTCTCAAGAGATGCTTCTGTTGGGAGGAGGAAGCC 1860
1880 Db ATCTTAACTCATTTAAAGGTTTCTTCTCAAGAGATGCTTCTGTTGGGAGGAGGAAGCC 1939
1861 QY CCAGCAAAAGTATGTAACAAGCAACATCCAGCTTCAAGGAGATGCTGCGAGGATCTCTC 1920
1940 Db CCAGCAAAAGTATGTAACAAGCAACATCCAGCTTCAAGGAGATGCTGCGAGGATCTCTC 1999
1921 QY CTCCAGGAGAACGGCCATATTTATGTTGTGGAGATGCAAGATATGCGCCAGGATGTA 1980
2000 Db CTCCAGGAGAACGGCCATATTTATGTTGTGGAGATGCAAGATATGCGCCAGGATGTA 2059
1981 QY CATGATGCCCTTGTGCAAAATATTAAGCAAGAGGTTGGAGTTGAAAACTAGAGCAATG 2040
2060 Db CATGATGCCCTTGTGCAAAATATTAAGCAAGAGGTTGGAGTTGAAAACTAGAGCAATG 2119
2041 QY AAAACCTTGGCCACTTTTAAAAAGAAAAACGCTACCTTCAAGGATATTTGGTCTATAA 2097
2120 Db AAAACCTTGGCCACTTTTAAAAAGAAAAACGCTACCTTCAAGGATATTTGGTCTATAA 2176

RESULT 6

US-09-371-347-41
; Sequence 41, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE.
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-41

Query Match 99.9%; Score 2095.4; DB 10; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 ATGAGAGGTTTCTGTTACTATATCTACAGCAGGAGCAAGGCAAGCCATCGCAGAA 60
Db 1 ATGAGAGGTTTCTGTTACTATATCTACAGCAGGAGCAAGGCAAGCCATCGCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGTACATGATTTCTTCAGAGATCTTTCACGTATTAGTAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTACATGATTTCTTCAGAGATCTTTCACGTATTAGTAA 120
QY 121 TCCGATATGATGACCTTAAAAACCGAAACGAGCTCTCTGTTGTTGTTGTTCTTACCAGC 180

Db 1981 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTGGAGTTGAAAACATAGAACAAATG 2040
QY 2041 AAAACCTGGCCACTTTAAAGAAAGAAAACGCTACCTTCAGATATATTTGGTCATAA 2097
Db 2041 AAAACCTGGCCACTTTAAAGAAAGAAAACGCTACCTTCAGATATATTTGGTCATAA 2097
RESULT 8
US-11-119-096-41
; Sequence 41, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; PRIOR FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-41
Query Match 99.9%; Score 2095.4; DB 26; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACAGCAAGGCCATCGCAGAA 60
Db 1 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA 60
QY 61 GAAATCTGTGAGCAAGCTGTGGTACATGGATTTTCTGCGAGATCTTCACTGTATTAGTGAA 120
Db 61 GAAATATGTGAGCAAGCTGTGGTACATGGATTTTCTGCGAGATCTTCACTGTATTAGTGAA 120
QY 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTGTGTGTGGTTTCTACCACG 180
Db 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTGTGTGTGGTTTCTACCACG 180
QY 181 GGCACCGGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAAAACA 240
Db 181 GGCACCGGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAAAACA 240
QY 241 CTGCGGTTGATTTCTTCTGCTACCTCGGTATGGGTACTGGGTCTCGGTGATTTCAGAA 300
Db 241 CTGCGGTTGATTTCTTCTGCTACCTCGGTATGGGTACTGGGTCTCGGTGATTTCAGAA 300
QY 301 TACACCTACTTTTGCATATGGGGGAAGATAAATTGATAAAGCACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATATGGGGGAAGATAAATTGATAAAGCACTTCAAGAGCTTGGAGCC 360
QY 361 CGGCATTTCTATGACACTGACATGACAGATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420
Db 361 CGGCATTTCTATGACACTGACATGACAGATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420
QY 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480

Db 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
QY 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGTCATCTTGGAGGACAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGTCATCTTGGAGGACAGACCTTGTG 540
QY 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTTCAG 600
Db 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTTCAG 600
QY 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGCAAGCAAAATGCAAGCAAGCAAGCA 660
Db 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGCAAGCAAAATGCAAGCAAGCAAGCA 660
QY 661 ATTGAAGACTTTTGAAGTCTCACTTACCGGTCGGTACCCCACTCTCACAAGCTCTCTG 720
Db 661 ATTGAAGACTTTTGAAGTCTCACTTACCGGTCGGTACCCCACTCTCACAAGCTCTCTG 720
QY 721 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGGTGCCAATTTCAAAG 840
Db 781 GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGGTGCCAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGACAT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGACAT 900
QY 901 TCAATATACAGACTTTTCTATCAGCTGGAGATGCTTCAGCGTGATCTGCCCTAACAGT 960
Db 901 TCAATATACAGACTTTTCTATCAGCTGGAGATGCTTCAGCGTGATCTGCCCTAACAGT 960
QY 961 GATTTCTGAGGTACAAAGCCCTACTCCAAAGACTTCGAGCTTGAAGATAAAAAAGAGCACTGC 1020
Db 961 GATTTCTGAGGTACAAAGCCCTACTCCAAAGACTTCGAGCTTGAAGATAAAAAAGAGCACTGC 1020
QY 1021 GTCTTTTGAATAAAGCAGACACAAAGAAAGAGGAGCTTACCTTACCCAGCATATA 1080
Db 1021 GTCTTTTGAATAAAGCAGACACAAAGAAAGAGGAGCTTACCTTACCCAGCATATA 1080
QY 1081 CTGCGGGATGTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGACCAATTCCT 1140
Db 1081 CTGCGGGATGTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGACCAATTCCT 1140
QY 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGACTATACAGTGACAGTCTGAAAAGCGCAGG 1200
Db 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGACTATACAGTGACAGTCTGAAAAGCGCAGG 1200
QY 1201 CTACAGGAGCTGTGAGTAAACAAAGGGCAGCCGATATATAGCCGCTTTTACAGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGAGTAAACAAAGGGCAGCCGATATATAGCCGCTTTTACAGAGATGCC 1260
QY 1261 TGTGCTGCTTGTGGATCTCTCTCGCTTTCCCTTCTTGGCAGCCACACTCAGTCTC 1320
Db 1261 TGTGCTGCTTGTGGATCTCTCTCGCTTTCCCTTCTTGGCAGCCACACTCAGTCTC 1320
QY 1321 CTGCTCGAATCTTCTCTAAACCTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAATCTTCTCTAAACCTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
QY 1381 TTTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGTTCTCGGGAAGGAGTATGTAAGAGTGGCTCGCCCTTGTGTGGTTGCTTCAAGTT 1500
Db 1441 ACAGAGTTCTCGGGAAGGAGTATGTAAGAGTGGCTCGCCCTTGTGTGGTTGCTTCAAGTT 1500
QY 1501 CTTTACCCCAACATACATGTCATCCCATGAAGACAGCGGGAAGGCCCTTGGCTCCTTAAGATA 1560

Db	1501	CTTCAGCCAAACATACATGCAATCCCATGAAGACAGCGGAAAGCCCTGGCTCCTTAAGATA	1560
Qy	1561	TCCATCTCTCTCGAAACAAACAAATTTCTTTTCCACTTTACAGAGATGACCCCTCAATCCCCATC	1620
Db	1561	TCCATCTCTCTCGAAACAAACAAATTTCTTTTCCACTTTACAGAGATGACCCCTCAATCCCCATC	1620
Qy	1621	ATAATGTGGTTCAGGAACCGGCATAGCCCGTTTATTTGGTTCCTTCAACATAGAGAG	1680
Db	1621	ATAATGTGGTTCAGGAACCGGCATAGCCCGTTTATTTGGTTCCTTCAACATAGAGAG	1680
Qy	1681	AAACTCCAAAGAACCAACCCAGATGGAAATTTTGGAGCAATCTGGTCTGTTTGGCTGC	1740
Db	1681	AAACTCCAAAGAACCAACCCAGATGGAAATTTTGGAGCAATCTGGTCTGTTTGGCTGC	1740
Qy	1741	AGGCATAAGGATAGGGATTACTATTTCAGAAAAGAGCTCAGACATTTCTTTAAGCATGGG	1800
Db	1741	AGGCATAAGGATAGGGATTACTATTTCAGAAAAGAGCTCAGACATTTCTTTAAGCATGGG	1800
Qy	1801	ATCTTAACATCATCTAAAGGTTTCCTTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCC	1860
Db	1801	ATCTTAACATCATCTAAAGGTTTCCTTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCC	1860
Qy	1861	CCAGCAAGTATGTACAAGACAAACATCCAGCTTCATGCCAGCAGGTGGCAGAAATCCTC	1920
Db	1861	CCAGCAAGTATGTACAAGACAAACATCCAGCTTCATGCCAGCAGGTGGCAGAAATCCTC	1920
Qy	1921	CTCCAGAGAGAACGGCCATATTTATGTGTGTGGAGATGCAAGAATAATGCCCAAGCATGTA	1980
Db	1921	CTCCAGAGAGAACGGCCATATTTATGTGTGTGGAGATGCAAGAATAATGCCCAAGCATGTA	1980
Qy	1981	CATGATGCCCTTGTGCAAAATAATAGCAAGAGGTTGGAGTTGAAAAAACTAGAACCAATG	2040
Db	1981	CATGATGCCCTTGTGCAAAATAATAGCAAGAGGTTGGAGTTGAAAAAACTAGAACCAATG	2040
Qy	2041	AAAAACCTGGGCCATTTTAAAAAGAGAAAAACGGTACCTTCAGGATATTTTGGTGCATAA	2097
Db	2041	AAAAACCTGGGCCATTTTAAAAAGAGAAAAACGGTACCTTCAGGATATTTTGGTGCATAA	2097

```

RESULT 9
US-11-119-096-43
; Sequence 43, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-43

```

Query Match	99.9%	Score 2095.4;	DB 26;	Length 2097;
Best Local Similarity	100.0%	Pred. No. 0;		

Matches 2096; Conservative		0;	Mismatches	1;	Indels	0;	Gaps	0;
Qy	1	ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGGGACAGGCAAAAGGCCATCGCAGAA	60					
Db	1	ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGGACAGGCAAAAGGCCATCGCAGAA	60					
Qy	61	GAATGTGTGAGCAAGCTGTGGTACATGATTTTTCGCAGATCTTCACTGTATTAGTGAA	120					
Db	61	GAATGTGTGAGCAAGCTGTGGTACATGATTTTTCGCAGATCTTCACTATATTAGTGAA	120					
Qy	121	TCCGATAAGTATGACCTTAAAAACCGAAAAAGCTCCTCTGTTGTTGTGGTTCCTACCAAG	180					
Db	121	TCCGATAAGTATGACCTTAAAAACCGAAAAAGCTCCTCTGTTGTTGTGGTTCCTACCAAG	180					
Qy	181	GGCACCGGAGACCCACCCGACACAGCCGCGCAAGTTTGTAAAGAAATACAGAAACCAAACA	240					
Db	181	GGCACCGGAGACCCACCCGACACAGCCGCGCAAGTTTGTAAAGAAATACAGAAACCAAACA	240					
Qy	241	CTCCGGTTGATTTCTTTTGTCTACCTGCGGTATGGGTACTCGGTCCTCGGTGATTAGAA	300					
Db	241	CTCCGGTTGATTTCTTTTGTCTACCTGCGGTATGGGTACTCGGTCCTCGGTGATTAGAA	300					
Qy	301	TACACCTACTTTTGTCAATGGGGGGAAGATAATTTGATAAACGACTTCAAGAGCTTGGAGCC	360					
Db	301	TACACCTACTTTTGTCAATGGGGGGAAGATAATTTGATAAACGACTTCAAGAGCTTGGAGCC	360					
Qy	361	CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTTTAGAACTTTGGTTTGAG	420					
Db	361	CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTTTAGAACTTTGGTTTGAG	420					
Qy	421	CCGTGGAATTCCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTATAGTCAAGCAGAGGACAA	480					
Db	421	CCGTGGAATTCCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTATAGTCAAGCAGAGGACAA	480					
Qy	481	GAGGATATAGTCGGCCACTCCCGTGGCATCACCTGCATCCTTTGAGGACAGACCTTGTG	540					
Db	481	GAGGATATAGTCGGCCACTCCCGTGGCATCACCTGCATCCTTTGAGGACAGACCTTGTG	540					
Qy	541	AAGTTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600					
Db	541	AAGTTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600					
Qy	601	AGAAAGGATTCAGAGTTTGAAGCAAAATGCAAGTGAAACAGAAACCAATCCAATGTTGTA	660					
Db	601	AGAAAGGATTCAGAGTTTGAAGCAAAATGCAAGTGAAACAGAAACCAATCCAATGTTGTA	660					
Qy	661	ATTGMAAGCTTCAGTTCCTCACTTACCCTTCGTTCCGTACCCCACTCTCACAAAGCCTCTCTG	720					
Db	661	ATTGMAAGCTTCAGTTCCTCACTTACCCTTCGTTCCGTACCCCACTCTCACAAAGCCTCTCTG	720					
Qy	721	AATATTCTCTGGTTTACCCCCAGAAATTTTACAGGTATACATCGCAGGAGTCTCTTGGCCAG	780					
Db	721	AATATTCTCTGGTTTACCCCCAGAAATTTTACAGGTATACATCGCAGGAGTCTCTTGGCCAG	780					
Qy	781	GAGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG	840					
Db	781	GAGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG	840					
Qy	841	GCAGTTCAACTTACTACGATGATGCATAAAACCACTCTGCTGGTAGAATTTGGACATT	900					
Db	841	GCAGTTCAACTTACTACGATGATGCATAAAACCACTCTGCTGGTAGAATTTGGACATT	900					
Qy	901	TCAATAACAGACTTTTCTTATCAGCTGGAGATGCTTTCAGCGGTGATCTGCCCTAAACGT	960					
Db	901	TCAATAACAGACTTTTCTTATCAGCTGGAGATGCTTTCAGCGGTGATCTGCCCTAAACGT	960					
Qy	961	GATTTCTGAGTACAAAGCCTTCTCCAAGACTGCGAGTTGAAGATAAAAGAGAGCACTGC	1020					
Db	961	GATTTCTGAGTACAAAGCCTTCTCCAAGACTGCGAGTTGAAGATAAAAGAGAGCACTGC	1020					
Qy	1021	GTCTTTTGAANAATAAAGGCAGACACAAAGAAAGGAGCTACCTTACCCAGCATATA	1080					
Db	1021	GTCTTTTGAANAATAAAGGCAGACACAAAGAAAGGAGCTACCTTACCCAGCATATA	1080					

1081 CCTGGGGATGTTCTCTCAGTTTCATTTTACCTGGTGTCTTGAAATCCGAGCAATTCCT 1140
1081 CCTGGGGATGTTCTCTCAGTTTCATTTTACCTGGTGTCTTGAAATCCGAGCAATTCCT 1140
1141 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATPACCAAGTGCAGAGTCTGAAAAGCGCAGG 1200
1141 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATPACCAAGTGCAGAGTCTGAAAAGCGCAGG 1200
1201 CTACAGAGTGTGCGATTAACAAAGGGGAGCGGATATAGCCGCTTTGTACAGATGCC 1260
1201 CTACAGAGTGTGCGATTAACAAAGGGGAGCGGATATAGCCGCTTTGTACAGATGCC 1260
1261 TGTGCTGCTGTGTGGATCTCTCCCTGCTTTCCCTTTCTTGGCAGGACCACTCACTCTC 1320
1261 TGTGCTGCTGTGTGGATCTCTCCCTGCTTTCCCTTTCTTGGCAGGACCACTCACTCTC 1320
1321 CTGCTCGAATCTTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
1321 CTGCTCGAATCTTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
1381 TTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAATTTCTGTCTACTGCCACA 1440
1381 TTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAATTTCTGTCTACTGCCACA 1440
1441 ACAGAGTGTCTGGGAAGGAGTATGTACAGGCTGGCTGGCTTTGTGGTCTTCAGTT 1500
1441 ACAGAGTGTCTGGGAAGGAGTATGTACAGGCTGGCTGGCTTTGTGGTCTTCAGTT 1500
1501 CTTTACGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGGCTCTCTAAGATA 1560
1501 CTTTACGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGGCTCTCTAAGATA 1560
1561 TCCATCTCTCTCGAACAACAATTTCTTCCATTTACCAATGACCCCTCAATCCCATC 1620
1561 TCCATCTCTCTCGAACAACAATTTCTTCCATTTACCAATGACCCCTCAATCCCATC 1620
1621 ATAACTGGTGGTCCAGAACCCGATAGCCCGTATTTGGGTTCTTCAACAATAGAGAG 1680
1621 ATAACTGGTGGTCCAGAACCCGATAGCCCGTATTTGGGTTCTTCAACAATAGAGAG 1680
1681 AAACCTCCAGAAACAACACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTGGCTGC 1740
1681 AAACCTCCAGAAACAACACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTGGCTGC 1740
1741 AGGCATAAGATAGGATTAATCTATTCAGAAAGAGCTCAGACATTTTCTTAAGCATGGG 1800
1741 AGGCATAAGATAGGATTAATCTATTCAGAAAGAGCTCAGACATTTTCTTAAGCATGGG 1800
1801 ATCTTAACCTCATTAAGGTTTCTTCTCAAGAGATGCTCCTTGGGGAGGAGGAGCC 1860
1801 ATCTTAACCTCATTAAGGTTTCTTCTCAAGAGATGCTCCTTGGGGAGGAGGAGCC 1860
1861 CCAGCAAGATATGTACAAGACACATCCAGCTTCATGGCCAGAGTGGCGAGATCCTC 1920
1861 CCAGCAAGATATGTACAAGACACATCCAGCTTCATGGCCAGAGTGGCGAGATCCTC 1920
1921 CTCAGAGAGAACCGGCATATTTATGTGTGFGAGATGCAAAAGAAATATGGCCAAAGATGTA 1980
1921 CTCAGAGAGAACCGGCATATTTATGTGTGFGAGATGCAAAAGAAATATGGCCAAAGATGTA 1980
1981 CATGATGCCCTTCTGCAATAATTAAGCAAGAGGTTGGAGTTGCAAACTAGAACATG 2040
1981 CATGATGCCCTTCTGCAATAATTAAGCAAGAGGTTGGAGTTGCAAACTAGAACATG 2040
2041 AAAACCTGGCCACTTTAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2097
2041 AAAACCTGGCCACTTTAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2097

RESULT 10
US-10-741-600-692
; Sequence 692, Application US/10741600

Publication No. US20050026169A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001499
CURRENT APPLICATION NUMBER: US/10/741,600
CURRENT FILING DATE: 2003-12-22
NUMBER OF SEQ ID NOS: 73997
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 692
LENGTH: 3256
TYPE: DNA
ORGANISM: Homo sapiens
US-10-741-600-692

Query Match 99.6%; Score 2088.6; DB 22; Length 3256;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 2076; Conservative 21; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGAGGTTTCTGTTACTATATGCTACAGAGGGAGCAGGCAAGGCCATTCGAGAA 60
Db 94 ATGAGAGGTTTCTGTTACTATATGCTACAGAGGGAGCAGGCAAGGCCATTCGAGAA 153
QY 61 GAAATGTGTGAGCAAGCTGTGTACATGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 154 GAAATGTGTGAGCAAGCTGTGTACATGATTTTCTGCAGATCTTCACTGTATTAGTGAA 213
QY 121 TCCGATAAGTATGACCTAAACACCGAAACAGCTCCTCTTTGTTGTTGTGTTTCTACCAG 180
Db 214 TCCGATAAGTATGACCTAAACACCGAAACAGCTCCTCTTTGTTGTTGTGTTTCTACCAG 273
QY 181 GGCACGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 274 GGCACGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 333
QY 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTACTGGGTCTCGGTGATTGAGAA 300
Db 334 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTACTGGGTCTCGGTGATTGAGAA 393
QY 301 TACACCTACTTTTGCATGGGGGAGATAATTTGATTAACGATTCAGAGCTTGGAGCC 360
Db 394 TACACCTACTTTTGCATGGGGGAGATAATTTGATTAACGATTCAGAGCTTGGAGCC 453
QY 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTAGGTTTGAACCTCTGGTTGAG 420
Db 454 CGGCATTTCTATGACACTGGACATGCAGATGACTGTAGGTTTGAACCTCTGGTTGAG 513
QY 421 CCGTGGATTGCTGGACTCTGGCGAGCCCTCAGAAAGCATTTTGTAGGTCAAGAGAGACAA 480
Db 514 CCGTGGATTGCTGGACTCTGGCGAGCCCTCAGAAAGCATTTTGTAGGTCAAGAGAGACAA 573
QY 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGTCATCCTTGAAGACAGACCTTGTG 540
Db 574 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGTCATCCTTGAAGACAGACCTTGTG 633
QY 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGCA 600
Db 634 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGCA 693
QY 601 AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGCAACCAATCCCAATGTTGTA 660
Db 694 AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGCAACCAATCCCAATGTTGTA 753
QY 661 ATTGAAGACTTTTGAAGTCTCACTTACCCTTGGTACCCCACTCTCAAGGCTCTCTG 720
Db 754 ATTGAAGACTTTTGAAGTCTCACTTACCCTTGGTACCCCACTCTCAAGGCTCTCTG 813
QY 721 AATATTCCTGGTTTACCCCGAGAAATTTTACAGGTATCATCTCAGAGTCTCTTGGCCAG 780
Db 814 AATATTCCTGGTTTACCCCGAGAAATTTTACAGGTATCATCTCAGAGTCTCTTGGCCAG 873
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTGTTCAGTGGCAATTTTCAAAG 840

Db 874 GAGGAAAGCCAGATATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCCAAATTTCAAAG 933
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACCTCTGCTGTAGAAATTTGGACATT 900
Db 934 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACCTCTGCTGTAGAAATTTGGACATT 993
Qy 901 TCAATAACAGACTTTTCTTATCAGCTTGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
Db 994 TCAATACAGACTTTTCTTATCAGCTTGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 1053
Qy 961 GATTTGAGGTACAAAGCCTTCTCAAGACTTCAAGACTTGAAGATAAAAGAGAGCACTGC 1020
Db 1054 GATTTGAGGTACAAAGCCTTCTCAAGACTTCAAGACTTGAAGATAAAAGAGAGCACTGC 1113
Qy 1021 GTCTTTTGAATAAAGGCAGACACAAAGAAAGAGAGCTACCTTACCCTCCAGCATATA 1080
Db 1114 GTCTTTTGAATAAAGGCAGACACAAAGAAAGAGAGCTACCTTACCCTCCAGCATATA 1173
Qy 1081 CTTGGGGATGTTCTCTCAGATTCAATTTTACCTGTGTCTTGAATTCGAGCAATTCCT 1140
Db 1174 CTTGGGGATGTTCTCTCAGATTCAATTTTACCTGTGTCTTGAATTCGAGCAATTCCT 1233
Qy 1141 AAAAGGCATTTTTCGAGCCCTTGGAGCTATACCAGTGACAGTCTGAAAGCGCAGG 1200
Db 1234 AAAAGGCATTTTTCGAGCCCTTGGAGCTATACCAGTGACAGTCTGAAAGCGCAGG 1293
Qy 1201 CTACAGAGCTGTGCAAGTAAACAAAGGGCAGCGATTATAGCGCTTGTACGAGATGCC 1260
Db 1294 CTACAGAGCTGTGCAAGTAAACAAAGGGCAGCGATTATAGCYGCTTGTACGAGATGCC 1353
Qy 1261 TGTGCTGCTGTTGTGATCTCTCTCGCTTTCCCTTTCGTCAGTCTGCTTTCAGTCTC 1320
Db 1354 TGTGCTGCTGTTGTGATCTCTCTCGCTTTCCCTTTCGTCAGTCTGCTTTCAGTCTC 1413
Qy 1321 CTGCTCGACATCTTCTTAACTTCAACCAGACCATATTCGTGCAAGCTCAAGTTTA 1380
Db 1414 CTGCTCGAATCTTCTTAACTTCAACCAGACCATATTCGTGCAAGCTCAAGTTTA 1473
Qy 1381 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
Db 1474 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1533
Qy 1441 ACAGAGTTCTCGGGAAGGAGTATGTACAGCTGCTGCTTTCCTTGTGTTGCTTCAGTT 1500
Db 1534 ACAGAGTTCTCGGGAAGGAGTATGTACAGCTGCTGCTTTCCTTGTGTTGCTTCAGTT 1593
Qy 1501 CTTACGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGCTCTTAAGATA 1560
Db 1594 CTTACGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGCTCTTAAGATA 1653
Qy 1561 TCCATCTCTCTCGAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
Db 1654 TCCATCTCTCTCGAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1713
Qy 1621 ATAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGTTCCTACAACATAGAGAG 1680
Db 1714 ATAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGTTCCTACAACATAGAGAG 1773
Qy 1681 AAATCCAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTTGGCTGC 1740
Db 1774 AAATCCAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTTGGCTGC 1833
Qy 1741 AGGCATAAGGATAGGATTTATCTTATTCAGAAAGAGCTCAGACATTTCTTAAGCATGG 1800
Db 1834 AGGCATAAGGATAGGATTTATCTTATTCAGAAAGAGCTCAGATTTCTTAAAGCATGG 1893
Qy 1801 ATCTTAACATCATCTAAAGGTTTCTCTCAAGAGATGCTCTGTTGGGAGGAGGAGCC 1860
Db 1894 ATCTTAACATCATCTAAAGGTTTCTCTCAAGAGATGCTCTGTTGGGAGGAGGAGCC 1953
Qy 1861 CCAGCAAAATGTTACAGACAAACATCCAGCTTTCAGGCGCAGCAGTGCGGAGATCTCTC 1920

Db 1954 CCAGCAAGTATGTRCAAGACAAATCCAGCTTCTATGGCCAGAGGTGCGRAGATCTCTC 2013
Qy 1921 CTCACGAGAACCGGCATATTTATTTGTGTGTGAGATGCAAGAAATATGCCCAGGATGTA 1980
Db 2014 CTCACGAGAACCGGCATATTTATTTGTGTGTGAGATGCAAGAAATATGCCCAGGATGTA 2073
Qy 1981 CATGATGCCCTTGTGCAATAATTAAGCAAGAGAGGTTGGAGTTGAAAACTAGAACCAATG 2040
Db 2074 CATGATGCCCTTGTGCAATAATTAAGCAAGAGAGGTTGGAGTTGAAAACTAGAACCAATG 2133
Qy 2041 AAAACCCCTGGCCACTTTTAAAGAAAGAAACCCCTACCTTCAGATATTTGGTCATAA 2097
Db 2134 AAAACCCCTGGCCACTTTTAAAGAAAGAAACCCCTACCTTCAGATATTTGGTCATAA 2190

RESULT 11
US-10-741-600-693
; Sequence 693, Application US/10741600
; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 693
; LENGTH: 3274
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-693

Query Match 99.6%; Score 2088.6; DB 22; Length 3274;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 2076; Conservative 21; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGAGGAGGTTTCTGTACTATATGCTACACAGAGGAGCAGGCAAGGCCATCGCAGAA 60
Db 112 ATGAGGAGGTTTCTGTACTATATGCTACACAGAGGAGCAGGCAAGGCCATCGCAGAA 171
Qy 61 GAATGTGTGAGCAAGCTGTGTGATCATGGATTTTCTGAGATCTTCACTGTATATTAGTAA 120
Db 172 GAATRTGTGAGCAAGCTGTGTGATCATGGATTTTCTGAGATCTTCACTGTATATTAGTAA 231
Qy 121 TCCGATATAGTATGACTTAAACCCGAAACAGCTCTCTGTTGTTGTTGTTGTTTCTACCAG 180
Db 232 TCCGATATAGTATGACTTAAACCCGAAACAGCTCTCTCTGTTGTTGTTGTTTCTACCAG 291
Qy 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 292 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 351
Qy 241 CTGCGGTTGATTTCTTTGCTCACCTGGGTTATGGGTTACTGGGCTCTGGGTTTCTGAGAA 300
Db 352 CTGCGGTTGATTTCTTTGCTCACCTGGGTTATGGGTTACTGGGCTCTGGGTTTCTGAGAA 411
Qy 301 TACACTACTTTTGCATGGGGGAGATATTTGATTAACGACTTCAAGAGCTTGGAGCC 360
Db 412 TACACTACTTTTGCATGGGGGAGATATTTGATTAACGACTTCAAGAGCTTGGAGCC 471
Qy 361 CGGCATTTCTATGACACTGGACATGACATGCTGTAGGTTTAAAGCTTCTGGTTGAG 420
Db 472 CGGCATTTCTATGACACTGGACATGACATGCTGTAGGTTTAAAGCTTCTGGTTGAG 531
Qy 421 CGGTGATTTGTGATCTCTGCGCCAGCCCTCAGAAAGCATTTTGTAGGTCAAGCAGAGACAA 480
Db 532 CGGTGATTTGTGATCTCTGCGCCAGCCCTCAGAAAGCATTTTGTAGGTCAAGCAGAGACAA 591
Qy 481 GAGGAGATAGTGGCGCACTCCCGGTGGCATCACCTGTCATCTTGGAGCAGACCTTGTG 540
Db 592 GAGGAGATAGTGGCGCACTCCCGGTGGCATCACCTGTCATCTTGGAGCAGACCTTGTG 651

Qy	541	AAGTCAGAGCTGCTACACATTGAACTCTCAAGTCGAGCTTCTGAGATTTCGATGATT	CAGGA	600
Db	652	AAGTCAGAGCTGCTACACATTGAACTCTCAAGTCGAGCTTCTGAGATTTCGATGATT	CAGGA	711
Qy	601	AGAAAGGATCTGAGGTTTTGAAGCAAAATGCAAGTGAACCAACCAATCCAATGTTGTA	660	
Db	712	AGAAAGGATCTGAGGTTTTGAAGCAAAATGCAAGTGAACCAACCAATCCAATGTTGTA	771	
Qy	661	ATTCAAGAATTGAGTCCTCACTTACCCTGTTCCGTACCCCACTCTCACAAGCCTCTCTG	720	
Db	772	ATTGAAGATTTGAGTCCTCACTTACCCTGTTCCGTACCCCACTCTCACAAGCCTCTCTG	831	
Qy	721	AATATTCTCTGTTTACCCCAAGAAATATTTACAGGTACATCTGACGGAGTCTCTTTGCCAG	780	
Db	832	AATATTCTCTGTTTACCCCAAGAAATATTTACAGGTACATCTGACGGAGTCTCTTTGCCAG	891	
Qy	781	GAGGAAGCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAG	840	
Db	892	GAGGAAGCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAG	951	
Qy	841	GCAGTTCAACTTACTAGCAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATT	900	
Db	952	GCAGTTCAACTTACTAGCAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATT	1011	
Qy	901	TCAAATACAGACTTTTCTATCAGCTTGGAGATGCCATTACGCGTGATCTGCCCTAACAGT	960	
Db	1012	TCAAATACAGACTTTTCTATCAGCTTGGAGATGCCATTACGCGTGATCTGCCCTAACAGT	1071	
Qy	961	GATTTCTGAGGTACAAAGCCTACTCCAAGACTCGAGCTTCAAGATATAAAGAGGAGCTGC	1020	
Db	1072	GATTTCTGAGGTACAAAGCCTACTCCAAGACTCGAGCTTCAAGATATAAAGAGGAGCTGC	1131	
Qy	1021	GTCCTTTTGAAATATAAAGGCAGACAACAAGAAAGGAGGACTACTTACCCAGCATATA	1080	
Db	1132	GTCCTTTTGAAATATAAAGGCAGACAACAAGAAAGGAGGACTACTTACCCAGCATATA	1191	
Qy	1081	CCTCGGGAGTGTCTCTCGAGTTCATTTTTACCTGGTGTCTTGAATTCGAGCAATTCCT	1140	
Db	1192	CCTCGGGAGTGTCTCTCGAGTTCATTTTTACCTGGTGTCTTGAATTCGAGCAATTCCT	1251	
Qy	1141	AAAAGGCAATTTTTCGAGCCCTTGTGGACTATACCAGTCACAGTGTCTGAAAAGCGCAGG	1200	
Db	1252	AAAAGGCAATTTTTCGAGCCCTTGTGGACTATACCAGTCACAGTGTCTGAAAAGCGCAGG	1311	
Qy	1201	CTACAGGAGCTGTGAGTAAACAAGGGGCGACCGAATTATAGCCGCTTTGTACGAGATGCC	1260	
Db	1312	CTACAGGAGCTGTGAGTAAACAAGGGGCGACCGAATTATAGCCGCTTTGTACGAGATGCC	1371	
Qy	1261	TGTGCTGCTGTTGGATCTCCTCTCGCTTTCCCTTCTTGGCCAGCCACCACTCAGTCTC	1320	
Db	1372	TGTGCTGCTGTTGGATCTCCTCTCGCTTTCCCTTCTTGGCCAGCCACCACTCAGTCTC	1431	
Qy	1321	CTGCTCGAAACATCTTCTCTAAACTTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380	
Db	1432	CTGCTCGAAACATCTTCTCTAAACTTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1491	
Qy	1381	TTTCAACCCAGAAAGCTCCATTTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCCACA	1440	
Db	1492	TTTCAACCCAGAAAGCTCCATTTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCCACA	1551	
Qy	1441	ACAGAGTTCTGCGGAGGGAGTATGTACAGGCTGGCTGGCTTGTGGTGTCTTCAAGTT	1500	
Db	1552	ACAGAGTTCTGCGGAGGGAGTATGTACAGGCTGGCTGGCTTGTGGTGTCTTCAAGTT	1611	
Qy	1501	CTTCAGCCAAACATACATGCAATCCATGAAGACAGCGGAAGCCCTGGGCTCTCTAAGATA	1560	
Db	1612	CTTCAGCCAAACATACATGCAATCCATGAAGACAGCGGAAGCCCTGGGCTCTCTAAGATA	1671	
Qy	1561	TCCATCTCTCTCGAAACAACAAATTTCTTTTCCATTTACAGATGACCCCTCAATCCCCTATC	1620	
Db	1672	TCCATCTCTCTCGAAACAACAAATTTCTTTTCCATTTACAGATGACCCCTCAATCCCCTATC	1731	

RESULT 12

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US-09-371-347-45
; Sequence 45, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: ROY A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 50/071,522
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-45

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Query Match	99.2%	Score 2081;	DB 10;	Length 2094;
Best Local Similarity	99.9%	Pred. No. 0;		
Matches 2094;	Conservative	0;	Mismatches 0;	Indels 3;
				Gaps 1;

Qy	1	ATGAGGAGGTTTCGTGTTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCGAA	60
Db	1	ATGAGGAGGTTTCGTGTTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCGAA	60
Qy	61	GAATGTGTGAGCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGAA	120
Db	61	GAATGTGTGAGCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGAA	120
Qy	121	TCCGATAAAGTATGACCTTAAAAACGAAACAGCTCTTGTGTTGGTGTTCCTACCAACG	180
Db	121	TCCGATAAAGTATGACCTTAAAAACGAAACAGCTCTTGTGTTGGTGTTCCTACCAACG	180

Qy	181	GGCACCGGAGACCCACCCCGACACAGCCCGCAAGTTTGTTAAGGAAATACAGAACCAAAACA	240
Db	181	GGCACCGGAGACCCACCCCGACACAGCCCGCAAGTTTGTTAAGGAAATACAGAACCAAAACA	240
Qy	241	CTGCGGGTTGATTTCTTTTGTCTCACTCGCGGTATCGGTTACTTGGGTCTCGGTGATTCAGAA	300
Db	241	CTGCGGGTTGATTTCTTTTGTCTCACTCGCGGTATCGGTTACTTGGGTCTCGGTGATTCAGAA	300
Qy	301	TACACCTACTTTTGTCAATGGGGGGAAGATAATTGATAAAGCACTTCAAGAGCTTTGGAGCC	360
Db	301	TACACCTACTTTTGTCAATGGGGGGAAGATAATTGATAAAGCACTTCAAGAGCTTTGGAGCC	360
Qy	361	CGGCATTTCTATGACATCTGAGCATGACATGACATGCTGTAGTGTAGAACTTGTGGTTGAG	420
Db	361	CGGCATTTCTATGACATCTGAGCATGACATGACATGCTGTAGTGTAGAACTTGTGGTTGAG	420
Qy	421	CCGTGGATTTGCTGACACTCTGCCAGCCCTCAGAAAGCATTTTAGTTCAAAGCAGAGACAA	480
Db	421	CCGTGGATTTGCTGACACTCTGCCAGCCCTCAGAAAGCATTTTAGTTCAAAGCAGAGACAA	480
Qy	481	GAGGAGATAAGTGGCGCACTCCCGTGGCATCACCTGCATCCTTTGAGGACAGACACTTTGTG	540
Db	481	GAGGAGATAAGTGGCGCACTCCCGTGGCATCACCTGCATCCTTTGAGGACAGACACTTTGTG	540
Qy	541	AAGTCAGAGCTGCTACACATGGAATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGGA	600
Db	541	AAGTCAGAGCTGCTACACATGGAATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGGA	600
Qy	601	AGAAAGGATCTGAGGTTTTGAAGCAAAATGCAGTGAACGACCACTTCCAAATGTTGTA	660
Db	601	AGAAAGGATCTGAGGTTTTGAAGCAAAATGCAGTGAACGACCACTTCCAAATGTTGTA	660
Qy	661	ATTGAAGACTTTTGAGTCTCACTTACCCTGTTCCGTACCCCACTCTCAAGGCTCTCTG	720
Db	661	ATTGAAGACTTTTGAGTCTCACTTACCCTGTTCCGTACCCCACTCTCAAGGCTCTCTG	720
Qy	721	AATATTCTTGTTTTACCCCAAGATATTTTACAGGTACATCTGCAAGGAGTCTCTTGGCCAG	780
Db	721	AATATTCTTGTTTTACCCCAAGATATTTTACAGGTACATCTGCAAGGAGTCTCTTGGCCAG	780
Qy	781	GAGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAAGTGCCAAATTTCAAAG	840
Db	781	GAGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAAGTGCCAAATTTCAAAG	840
Qy	841	GCAGTTCAACTTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATT	900
Db	841	GCAGTTCAACTTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATT	900
Qy	901	TCAAATAACAGACTTTTCTATCAGCTGGAGATGCCCTTCAGCGGTGATCTGCCCTTAACAGT	960
Db	901	TCAAATAACAGACTTTTCTATCAGCTGGAGATGCCCTTCAGCGGTGATCTGCCCTTAACAGT	960
Qy	961	GATTTCTGAGGTACAAAGCCTACTCCAAGACTGCAGCTTGAGATGAGATAAAGAGAGCACTGC	1020
Db	961	GATTTCTGAGGTACAAAGCCTACTCCAAGACTGCAGCTTGAGATGAGATAAAGAGAGCACTGC	1020
Qy	1021	GTCCCTTTTGAATAAAGGGCAGACACAAAGAAAGAAAGAGAGCTACCTTTACCCAGCATATA	1080
Db	1021	GTCCCTTTTGAATAAAGGGCAGACACAAAGAAAGAAAGAGAGCTACCTTTACCCAGCATATA	1080
Qy	1081	CCTGCGGATGTTCTCTCCAGTTCATTTTTTACCTGGTGTCTTGAATTCGAGCAATTCCT	1140
Db	1081	CCTGCGGATGTTCTCTCCAGTTCATTTTTTACCTGGTGTCTTGAATTCGAGCAATTCCT	1140
Qy	1141	AAAAAGGCATTTTTTCGAGGCCCTTGTGGAATAACAGTGAAGTGTGCTGTAAGAGCGGAGG	1200
Db	1141	AAAAAGGCATTTTTTCGAGGCCCTTGTGGAATAACAGTGAAGTGTGCTGTAAGAGCGGAGG	1200
Qy	1201	CTACAGAGCTGTCAAGTAAACAAAGGGCAGCCGATTTATAGCGCTTTGTACGAGATGCC	1260
Db	1201	CTACAGAGCTGTCAAGTAAACAAAGGGCAGCCGATTTATAGCGCTTTGTACGAGATGCC	1260
Qy	1261	TGTGCCCTGCTTGTGGATCTCCCTCTCGCTTTCCCTTTCTTGGCCAGGCACCACTCAGTCTC	1320

[illegible]

RESULT 13
US-11-119-096-45
: Sequence 45, Application US/11119096
: Publication No. US20050191701A1
: GENERAL INFORMATION:
: APPLICANT: Gravel, Roy A,
: APPLICANT: Rozen, Rima
: APPLICANT: Leclerc, Daniel
: APPLICANT: Wilson, Aaron
: APPLICANT: Rosenblatt, David
: TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
: TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING THE
: TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
: FILE REFERENCE: 50004/003005
: CURRENT APPLICATION NUMBER: US/11/119,096
: CURRENT FILING DATE: 2005-04-29
: PRIORITY APPLICATION NUMBER: 09/487,841

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; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-45

Query Match      99.2%; Score 2081; DB 26; Length 2094;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 3; Gaps 1;

QY 1 ATGAGGAGGTTCTGTATCTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA 60
D 1 ATGAGGAGGTTCTGTATCTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGAA 120
D 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGAA 120
QY 121 TCGGATAAGTATGACTTAAACCGAAACAGCTCTCTTGTGTTGTGTTCTACACAG 180
D 121 TCGGATAAGTATGACTTAAACCGAAACAGCTCTCTTGTGTTGTGTTCTACACAG 180
QY 181 GGCACGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
D 181 GGCACGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
QY 241 CTGCGGTTGATTTCTTGTCTCACTCGGTATGGGTACTTGGGTCTCGGTGATTGAGAA 300
D 241 CTGCGGTTGATTTCTTGTCTCACTCGGTATGGGTACTTGGGTCTCGGTGATTGAGAA 300
QY 301 TACACCTACTTTTGCATGGGGGAGAGATAATGTATAACAGCTTCAAGAGCTTGAGCC 360
D 301 TACACCTACTTTTGCATGGGGGAGAGATAATGTATAACAGCTTCAAGAGCTTGAGCC 360
QY 361 CGGCATTTCTAGACATCGACATGAGATGATGTTAGGTTTGAATCTTGGTTGAG 420
D 361 CGGCATTTCTAGACATCGACATGAGATGATGTTAGGTTTGAATCTTGGTTGAG 420
QY 421 CCGTGGATTGCTGGAATCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
D 421 CCGTGGATTGCTGGAATCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
QY 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGCACTCTTGAGGACAGACCTTGTG 540
D 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGCACTCTTGAGGACAGACCTTGTG 540
QY 541 AAGTCAGAGTGTCTACATTGATCTCAAGTCAGCTTCTGAGATTCGATGTTTCAAG 600
D 541 AAGTCAGAGTGTCTACATTGATCTCAAGTCAGCTTCTGAGATTCGATGTTTCAAG 600
QY 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
D 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
QY 661 ATTGAAGCTTTGAGTCTCTCACTTACCGGTTCCGTTCCGTTCCGTTCCGTTCCGTTCCG 720
D 661 ATTGAAGCTTTGAGTCTCTCACTTACCGGTTCCGTTCCGTTCCGTTCCGTTCCGTTCCG 720
QY 721 AATATTTCTGTTTACCCCGAGATATTTACAGGTACATCTGACAGGATCTCTTGGCCAG 780
D 721 AATATTTCTGTTTACCCCGAGATATTTACAGGTACATCTGACAGGATCTCTTGGCCAG 780
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTACAGAGATCCAGTTTTTCAAGTGGCAATTTCAAAG 840
D 781 GAGGAAAGCCAAAGTATCTGTGACTTACAGAGATCCAGTTTTTCAAGTGGCAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGGACATT 900
D 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGGACATT 900
QY 901 TCAAAATACAGACTTTTCTTATCAGCTCGAGATGCTTTCAGCGTGATCTGCCCTTAACAGT 960
D 901 TCAAAATACAGACTTTTCTTATCAGCTCGAGATGCTTTCAGCGTGATCTGCCCTTAACAGT 960
QY 961 GATCTGAGGTACAAAGCCTACTCCAAAGACTGCAAGTGAAGATAAAGAGAGACACTGC 1020
D 961 GATCTGAGGTACAAAGCCTACTCCAAAGACTGCAAGTGAAGATAAAGAGAGACACTGC 1020
QY 1021 GTCCCTTTGAAATAAAGCGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
D 1021 GTCCCTTTGAAATAAAGCGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
QY 1081 CCGCGGATGTTCTCTCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
D 1081 CCGCGGATGTTCTCTCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
QY 1141 AAAAAAGGCATTTTTCGAGCCCTTGTGACTATACCAAGTACAGTCTGTAAGAGCGCAG 1200
D 1141 AAAAAAGGCATTTTTCGAGCCCTTGTGACTATACCAAGTACAGTCTGTAAGAGCGCAG 1200
QY 1201 CTACAGGAGCTGTGAGTAAACAAAGGCGAGCGGATATAGCGCTTTGTACGAGATGCC 1260
D 1201 CTACAGGAGCTGTGAGTAAACAAAGGCGAGCGGATATAGCGCTTTGTACGAGATGCC 1260
QY 1261 TGTGCTGCTTCTGATCTCTCTCGCTTTCCTTCTTGGCAGCAGCACCTCAAGTCTC 1320
D 1261 TGTGCTGCTTCTGATCTCTCTCGCTTTCCTTCTTGGCAGCAGCACCTCAAGTCTC 1320
QY 1321 CTGCTCGAATCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 1380
D 1321 CTGCTCGAATCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 1380
QY 1381 TTTTCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
D 1381 TTTTCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGGTTCTCGGAGGAGTATGTACAGGCTGGCTTGTGGTCTTCTTCTTCTTCTTCTTCT 1500
D 1441 ACAGAGGTTCTCGGAGGAGTATGTACAGGCTGGCTTGTGGTCTTCTTCTTCTTCTTCTTCT 1500
QY 1501 CTTTCCAGCAAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTTCTTCTTCTTCTTCT 1560
D 1501 CTTTCCAGCAAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTTCTTCTTCTTCTTCT 1560
QY 1561 TCCATCTCTCTCGAACAACAAATTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 1620
D 1561 TCCATCTCTCTCGAACAACAAATTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 1620
QY 1621 AATAAGTGGGTCCAGGACCGGATAGCCGCTTATTTGGGTCTCTTCTTCTTCTTCTTCTTCTTCTTCT 1680
D 1621 AATAAGTGGGTCCAGGACCGGATAGCCGCTTATTTGGGTCTCTTCTTCTTCTTCTTCTTCTTCTTCT 1680
QY 1681 AAATCCAGAAACACACCCAGATGGAATTTTGGAGCAATTTGTTGTTTGGCTGC 1740
D 1681 AAATCCAGAAACACACCCAGATGGAATTTTGGAGCAATTTGTTGTTTGGCTGC 1740
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D 1741 AGGCATAGGATAGGATTTATCTTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
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D 1801 ATCTTAACTCATCTAAAGGTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 1860
QY 1861 CCAGCAAGATATGTACAGCAACATCCAGTTCATGGCCAGCAGAGTGGCGGAATCTCTC 1920
D 1861 CCAGCAAGATATGTACAGCAACATCCAGTTCATGGCCAGCAGAGTGGCGGAATCTCTC 1920
QY 1920 CCAGCAAGATATGTACAGCAACATCCAGTTCATGGCCAGCAGAGTGGCGGAATCTCTC 1980
D 1920 CCAGCAAGATATGTACAGCAACATCCAGTTCATGGCCAGCAGAGTGGCGGAATCTCTC 1980
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QY 1921 CTCAGGAGAAACGGCCATATTTATGTGTGGAGATGCAAAAGAAATATGCCCAAGGATGTA 1980
DB 1918 CTCAGGAGAAACGGCCATATTTATGTGTGGAGATGCAAAAGAAATATGCCCAAGGATGTA 1977
QY 1981 CATGATGCCCTTGTGCAATATATAGCAAGAGAGTTGGAGTTGCAAAATAGAACCAATG 2040
DB 1978 CATGATGCCCTTGTGCAATATATAGCAAGAGAGTTGGAGTTGCAAAATAGAACCAATG 2037
QY 2041 AAAACCTCGCCACTTTAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2097
DB 2038 AAAACCTCGCCACTTTAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2094

RESULT 14

US-09-371-347-47
; Sequence 47, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-47

Query Match 99.1%; Score 2079; DB 10; Length 2093;

Best Local Similarity 99.8%; Pred. No. 0;

Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;

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DB 1 ATGAGAGGTTTCTGTTACTATATGCTACACAGCAGGAGCAGCAAGGCCATCGCAGAA 60
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DB 61 GAAATGTGTGACCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACGTATTAGTGAA 120
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QY 181 GGCACCGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
DB 181 GGCACCGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
QY 241 CTGCGGTTGATTTCTTCTGCTACCTCGGTAATGGGTACTGGGTCTCGGTGATTGAGAA 300
DB 241 CTGCGGTTGATTTCTTCTGCTACCTCGGTAATGGGTACTGGGTCTCGGTGATTGAGAA 300
QY 301 TACACCTACTTTTGGCAATGGGGGAAGATAAATGATAAACGACTTCAAGAGCTTGGAGCC 360
DB 301 TACACCTACTTTTGGCAATGGGGGAAGATAAATGATAAACGACTTCAAGAGCTTGGAGCC 360
QY 361 CGGCATTCTATGACACTGGACATGAGATGACTGTGTAGTTAGAACTTGTGGTTGAG 420
DB 361 CGGCATTCTATGACACTGGACATGAGATGACTGTGTAGTTAGAACTTGTGGTTGAG 420
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DB 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGA 600
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QY 1261 TGTGCTGCTGTGTGATCT 1320
DB 1261 TGTGCTGCTGTGTGATCT 1320
QY 1321 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA 1380
DB 1321 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA 1380
QY 1381 TTTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
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QY 1441 ACAGAGGTTCTCGGAGAGGAGTATGTACAGCTGCTGCTCTCTCTCTCTCTCTCTCTCTCT 1500
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DB 1501 CTTTACCCAAAACATACATGCATCCCATGAAGACAGCGGGAAGCCCTCTGCTCTTAAGATA 1560

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Db 1677 AAATCTCAAGAAACAAACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTGGCTGC 1736
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Db 1917 CTCCTAGGAGAACGGCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGGATGA 1976
QY 1981 CATGATGCCCTTGTGCAAAATAAAGCAAGAGTTGGAGTTGAAAAAAGCTAGAACCAATG 2040
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QY 2041 AAAACCTGGCCACTTTAAAAGAAAGAAACCGTACCTTCAGGATATTTGGTCATAA 2097
Db 2037 AAAACCTGGCCACTTTAAAAGAAAGAAACCGTACCTTCAGGATATTTGGTCATAA 2093

RESULT 15
US-11-119-096-47
; Sequence 47, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Lecierc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119, 096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-47
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Query Match 99.1%; Score 2079; DB 26; Length 2093;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;

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Db 1 ATGAGGAGGTTTCTGTACTATATCTACAGACGAGGACAGGCAAAAGGCCATCGCAGAA 60
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Db 61 GAAATGTGTGAGCAAGCTGTGTACATGGAATTTCTGCAGATCTTCACTGTATTAAGTAA 120
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Db 121 TCCGATATAGTATGACTTAAAAACCGAAACAGCTCCTCTTGTGTGTGGTTCCTACCAGC 180
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Db 301 TACACCTACTTTTGGCAATGGGGGGAAGATAATTTGATATAACGACTTCAAGAGCTTGGAGC 360
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Db 361 CGGCATTTCTATGACACATGACATGATGATGATAGTTTAGAACTTGTGGTTGAG 420
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Db 421 CGGTGGAATGTGTGACTCTGCGCAGCCCTCAGAAAGCAATTTAGGTTCAAGCAGAGACAA 480
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Db 481 GAGGAGATAGTGGGCGACTCCGGTGGCATCACTGCACTCTTGGAGGACAGACCTTGTG 540
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Db 541 AAGTCAGAGCTGTACACATTCGAATCTCAAGTCGAGCTTCTGAGATTCCGATATTCAGGA 600
QY 601 AGAAAGGATTTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
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QY 661 ATTGAAGACTTTGAGTCTCACTTACCGTTCGGTACCCCACTCTCAAGGCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCACTTACCGTTCGGTACCCCACTCTCAAGGCTCTCTG 720
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Db 721 AATATTTCTGGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTCAAGTGCCTTCAAG 840
Db 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTCAAGTGCCTTCAAG 840
QY 841 GCAGTTCAACTTACTAGCAATGATGCAATAAAACCACTCTGCTGTAGAAATGGACAT 900
Db 841 GCAGTTCAACTTACTAGCAATGATGCAATAAAACCACTCTGCTGTAGAAATGGACAT 900
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Db 901 TCAATACAGACTTTTCTTATCAGCTGGAGATGCCCTCAGCGTGTATCTGCCCTAACAGT 960
QY 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTTGAAGATATAAGAGAGAGCCTGC 1020
Db 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTTGAAGATATAAGAGAGAGCCTGC 1020
QY 1021 GTCTTTTGAATTAAGGACGACACAAAGAGAGAGGAGCTACCTTACCCAGCATATA 1080
Db 1021 GTCTTTTGAATTAAGGACGACACAAAGAGAGAGGAGCTACCTTACCCAGCATATA 1080
QY 1081 CCTGCGGATGTCTCTCCAGTTTCAATTTTACCTGTGTCTTGAATTCGAGCAATTCCT 1140
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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 15:42:02 ; Search time 235.757 Seconds
(without alignments)
14554.251 Million cell updates/sec

Title: US-09-371-347A-41

Perfect score: 2097
Sequence: 1 atgaggaggtttctgttact.....ttcaggatatgtgtcataa 2097

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	2095.4	99.9	3259	3	US-09-318-448-23
2	2093.8	99.8	3242	4	US-09-349-016-4215
3	386.4	18.4	390	3	US-08-905-223-71
4	380.6	18.1	601	4	US-09-949-016-150019
5	379.4	18.1	35916	4	US-09-949-016-15957
6	379	18.1	601	4	US-09-949-016-150020
7	190.4	9.1	601	4	US-09-949-016-150037
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12	155.2	7.4	601	4	US-09-949-016-150030
13	154.8	7.4	601	4	US-09-949-016-150031
14	129.2	6.2	244	4	US-09-471-276-495
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27	63.6	3.0	4780	3	US-09-123-624-3

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30	57.6	2.7	4079	4	US-09-016-434-1477	Sequence 1477, Ap
31	57.2	2.7	5057	2	US-08-365-486A-12	Sequence 12, Appl
32	57.2	2.7	5057	3	US-08-880-342-12	Sequence 12, Appl
33	57.2	2.7	5108	1	US-07-642-002-1	Sequence 1, Appl
34	57.2	2.7	13508	4	US-08-956-171E-120	Sequence 120, App
35	57.2	2.7	13508	4	US-08-781-986A-120	Sequence 120, App
36	54.8	2.6	2403	4	US-09-023-655-1226	Sequence 1226, Ap
37	53.6	2.6	1863	3	US-09-627-216A-13	Sequence 13, Appl
38	53.6	2.6	1863	4	US-09-765-873A-13	Sequence 13, Appl
39	52.8	2.5	1890	3	US-09-134-001C-1557	Sequence 1557, Ap
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42	51.2	2.4	1887	4	US-09-710-279-2843	Sequence 2843, Ap
43	50.8	2.4	1929	4	US-09-543-681A-2997	Sequence 2997, Ap
44	50.2	2.4	1448	3	US-08-936-165A-113	Sequence 113, App
45	49.2	2.3	3037	4	US-09-911-781-10	Sequence 10, Appl

ALIGNMENTS

RESULT 1

US-09-318-448-23
; Sequence 23, Application US/09318448
; Patent No. 6210950
; GENERAL INFORMATION:
; APPLICANT: Johnson, William G.
; APPLICANT: Stenroos, Edward S.
; TITLE OF INVENTION: METHODS FOR DIAGNOSING, PREVENTING, AND TREATING
; FILE REFERENCE: 601-1-057
; CURRENT APPLICATION NUMBER: US/09/318,448
; CURRENT FILING DATE: 1999-05-25
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 23
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-318-448-23

Query Match		99.9%;	Score 2095.4;	DB 3;	Length 3259;
Best Local Similarity		100.0%;	Pred. No. 0;		
Matches 2096;		Conservative	0;	Mismatches	1; Indels 0; Gaps 0;
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DB	80	ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGGACAGGCAAGGCCATCGAGAA	139		
QY	61	GAATATGTGACCAAGCTGTGTACATGATTTCTGCAGATCTTCTCAGTATTAGTGAA	120		
DB	140	GAATGTGTGAGCAAGCTGTGTACATGATTTCTGCAGATCTTCTCAGTATTAGTGAA	199		
QY	121	TCGGATAAGTATGACCTCAAAACCCGAAACAGCTCTCTTTGTTGTTGTTTCTACACG	180		
DB	200	TCGGATAAGTATGACCTCAAAACCCGAAACAGCTCTCTTTGTTGTTGTTTCTACACG	259		
QY	181	GGCAGCGAGAGCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240		
DB	260	GGCAGCGAGAGCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	319		
QY	241	CTGCCGTTGATTCTTTCTGCTCACCTGCGGTATGGGTACTGGGTCTCGGTATTCAGAA	300		
DB	320	CTGCCGTTGATTCTTTCTGCTCACCTGCGGTATGGGTACTGGGTCTCGGTATTCAGAA	379		
QY	301	TACACCTACTTTTGAATGGGGGAGATAAATGTATAACGACTTCAAGAGCTTGAGCC	360		
DB	380	TACACCTACTTTTGAATGGGGGAGATAAATGTATAACGACTTCAAGAGCTTGAGCC	439		
QY	361	CGGCATTCTATGACACTCGACATGATGATGTTAGGTTTAGAATCTGTTGTTGAG	420		

Db 440 CGGCATTTCTATGACACTGGACATGCGATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 499
Qy 421 CCGTGAATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAGACGAGACAA 480
Db 500 CCGTGAATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAGACGAGACAA 559
Qy 481 GAGGAGATAAGTGGCCGCACTCCGGTGGCATCACCTGCAATCCTTGAGGACAGACCTTGTG 540
Db 560 GAGGAGATAAGTGGCCGCACTCCGGTGGCATCACCTGCAATCCTTGAGGACAGACCTTGTG 619
Qy 541 AAGTCAGAGTGCTACACATTTGAATCTCAAGTCGAGCTCTTGATGATTCGATTCAGGA 600
Db 620 AAGTCAGAGTGCTACACATTTGAATCTCAAGTCGAGCTCTTGATGATTCGATTCAGGA 679
Qy 601 AGAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 560
Db 680 AGAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCCCTCACTTACCCGTTGGTACCCCACTCTCAAGCCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCCCTCACTTACCCGTTGGTACCCCACTCTCAAGCCCTCTCTG 799
Qy 721 AATATTCTCTGGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
Db 800 AATATTCTCTGGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 859
Qy 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTCTTCAAGTGCCAATTTCAAAG 840
Db 860 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTCTTCAAGTGCCAATTTCAAAG 919
Qy 841 GCAGTTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTGTAGAAATTTGGACAT 900
Db 920 GCAGTTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTGTAGAAATTTGGACAT 979
Qy 901 TCAATATACAGACTTTTCTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
Db 980 TCAATATACAGACTTTTCTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 1039
Qy 961 GATTCGTAGGTACAAAGCCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGGACTGC 1020
Db 1040 GATTCGTAGGTACAAAGCCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGGACTGC 1099
Qy 1021 GTCCCTTTTGAATAAAGGACAGACACAAAGAAAGGAGCTACCTTACCCAGCATATA 1080
Db 1100 GTCCCTTTTGAATAAAGGACAGACACAAAGAAAGGAGCTACCTTACCCAGCATATA 1159
Qy 1081 CTGCGGGATGTTTCTCTCCAGTTTCATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1160 CTGCGGGATGTTTCTCTCCAGTTTCATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1219
Qy 1141 AAAAAGGCAATTTTGGAGCCCTTGTGGACTATACAGTGAAGTGTGAAAGGCGCAGG 1200
Db 1220 AAAAAGGCAATTTTGGAGCCCTTGTGGACTATACAGTGAAGTGTGAAAGGCGCAGG 1279
Qy 1201 CTACAGGAGCTGTGAGTAAACAAAGGCGGCGGATTTAGCCGCTTTGTACAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAAGGCGGCGGATTTAGCCGCTTTGTACAGATGCC 1339
Qy 1261 TGTGCTGCTTGTGGATCTCTCCCTCGCTTTCCCTTTCTTGGCAGCCACCACTCAGTCTC 1320
Db 1340 TGTGCTGCTTGTGGATCTCTCCCTCGCTTTCCCTTTCTTGGCAGCCACCACTCAGTCTC 1399
Qy 1321 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGGAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGGAAGCTCAAGTTTA 1459
Qy 1381 TTTTACCCAGGAAGCTTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTAGTCCACA 1440
Db 1460 TTTTACCCAGGAAGCTTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTAGTCCACA 1519
Qy 1441 ACAGAGGTTCTCGGGAAGGAGATGTATACAGGCTGGCTGGCTTGTGGTGTCTCAGTT 1500
Db 1520 ACAGAGGTTCTCGGGAAGGAGATGTATACAGGCTGGCTGGCTTGTGGTGTCTCAGTT 1579

Qy 1501 CTTTACGCCAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1560
Db 1580 CTTTACGCCAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAACCAACAAATTTCTTCCATTTACCAGATGACCCCTCAATCCCAATC 1620
Db 1640 TCCATCTCTCTCGAACCAACAAATTTCTTCCATTTACCAGATGACCCCTCAATCCCAATC 1699
Qy 1621 ATAAATGGTGGTTCAGGAACCGGCAATAGCCCGCTTTATTTGGTTCCTTACACATAGAG 1680
Db 1700 ATAAATGGTGGTTCAGGAACCGGCAATAGCCCGCTTTATTTGGTTCCTTACACATAGAG 1759
Qy 1681 AATCTCCAGAACACACCCAGATGGAATTTTGGAGCAATTTTGGTGTGTTTTTGGCTGC 1740
Db 1760 AATCTCCAGAACACACCCAGATGGAATTTTGGAGCAATTTTGGTGTGTTTTTGGCTGC 1819
Qy 1741 AGGCATAAGGATAGGATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db 1820 AGGCATAAGGATAGGATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1879
Qy 1801 ATCTTAACTCATCTAAAGTTTCTTCTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1860
Db 1880 ATCTTAACTCATCTAAAGTTTCTTCTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1939
Qy 1861 CCAGCAAAAGTATGTAACAGCAACATCCAGCTTCAATGGCCAGAGTGGCGAGAATCCCTC 1920
Db 1940 CCAGCAAAAGTATGTAACAGCAACATCCAGCTTCAATGGCCAGAGTGGCGAGAATCCCTC 1999
Qy 1921 CTCCAGGAGAACGGCCATATTTATGTGTGTGAGATGCAAGAAATATGGCCAAAGATGTA 1980
Db 2000 CTCCAGGAGAACGGCCATATTTATGTGTGTGAGATGCAAGAAATATGGCCAAAGATGTA 2059
Qy 1981 CATGATGCTTGTGCAATATAAGCAAAAGAGTGTGAGTTGAAAACTAGAACCAATG 2040
Db 2060 CATGATGCTTGTGCAATATAAGCAAAAGAGTGTGAGTTGAAAACTAGAACCAATG 2119
Qy 2041 AAAACCCCTGGCCACTTTTAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2097
Db 2120 AAAACCCCTGGCCACTTTTAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2176

RESULT 2

US-09-949-016-4215
; Sequence 4215, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4215
; LENGTH: 3242
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4215

Query Match 99.8%; Score 2093.8; DB 4; Length 3242;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2095; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 ATGAGAGGTTTCTGTCTACTATATGCTACAGCAGGAGCAGCAAGGCCATCGCAGAA 60
|||||

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[illegible]

Qy	1141	AAAAAGGCATTTTGGAGCCCTTTGGAGCTATACAGTGACAGTGTCTGAAAGCCGAGG	1200
Db	1220	AAAAAGGCATTTTGGAGCCCTTTGGAGCTATACAGTGACAGTGTCTGAAAGCCGAGG	1279
Qy	1201	CTACAGGAGCTGTGCAGTAAACAAGGGCAGCCGATTTATAGCCGCTTTGTACGAGATGCC	1260
Db	1280	CTACAGGAGCTGTGCAGTAAACAAGGGCAGCCGATTTATAGCCGCTTTGTACGAGATGCC	1339
Qy	1261	TGTGCTGCTTGTGTGGATCTCCTCTCGCTTTCCCTTTCTTGCCAGCCACCACTCAGTCTC	1320
Db	1340	TGTGCTGCTTGTGTGGATCTCCTCTCGCTTTCCCTTTCTTGCCAGCCACCACTCAGTCTC	1399
Qy	1321	CTGCTCGAACATCTTCTCTAAACTTCAACCAGACACATATTCGTGTGCAAGCTCAAGTTTA	1380
Db	1400	CTGCTCGAACATCTTCTCTAAACTTCAACCAGACACATATTCGTGTGCAAGCTCAAGTTTA	1459
Qy	1381	TTTCACCCAGGAAGCTCCATTTTGTCTTCAAATGTGGAAATTCCTGCTACTGCCACA	1440
Db	1460	TTTCACCCAGGAAGCTCCATTTTGTCTTCAAATGTGGAAATTCCTGCTACTGCCACA	1519
Qy	1441	ACAGAGTTCTCGGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTGGTTTGCCTCAGTT	1500
Db	1520	ACAGAGTTCTCGGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTGGTTTGCCTCAGTT	1579
Qy	1501	CTTCAGCCAAACATACATGTCATCCATGAAGACAGCGGGGAAGCCCTGGCTCCTAAGATA	1560
Db	1580	CTTCAGCCAAACATACATGTCATCCATGAAGACAGCGGGGAAGCCCTGGCTCCTAAGATA	1639
Qy	1561	TCCATCTCTCTCGAACCAACAAATTCCTTCCACTTACAGATGACCCCTCAATCCCCATC	1620
Db	1640	TCCATCTCTCTCGAACCAACAAATTCCTTCCACTTACAGATGACCCCTCAATCCCCATC	1699
Qy	1621	ATAATGGTGGTCCAGGAACCGGCATAGCCCCGTTTATGGGGTTCTTACAAACATAGAGAG	1680
Db	1700	ATAATGGTGGTCCAGGAACCGGCATAGCCCCGTTTATGGGGTTCTTACAAACATAGAGAG	1759
Qy	1681	AAACTCCAAGACAAACACCAGATGGAAATTTTGGAGCAATGTGGTTGTTTTTGGCTGC	1740
Db	1760	AAACTCCAAGACAAACACCAGATGGAAATTTTGGAGCAATGTGGTTGTTTTTGGCTGC	1819
Qy	1741	AGGATAAGGATAGGGAATATCTATTTCAGAAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1800
Db	1820	AGGATAAGGATAGGGAATATCTATTTCAGAAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1879
Qy	1801	ATCTTAACCTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCTCTGGGGAGGAGGAAGCC	1860
Db	1880	ATCTTAACCTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCTCTGGGGAGGAGGAAGCC	1939
Qy	1861	CCAGCAAGATATGTAACAGACAACTCCAGCTTCATGGCCAGCAGGTGGCGAAGATCCTC	1920
Db	1940	CCAGCAAGATATGTAACAGACAACTCCAGCTTCATGGCCAGCAGGTGGCGAAGATCCTC	1999
Qy	1921	CTCCAGGAGAACGGCCATATTTATGTGTGTGGAGATGCAAGAAATATGGCCAAAGGATGTA	1980
Db	2000	CTCCAGGAGAACGGCCATATTTATGTGTGTGGAGATGCAAGAAATATGGCCAAAGGATGTA	2059
Qy	1981	CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG	2040
Db	2060	CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG	2119
Qy	2041	AAAAACCTGGCCATTTTAAAGAAAGAAAAACGGCTACCTTCAGGATATTTGGTCATAA	2097
Db	2120	AAAAACCTGGCCATTTTAAAGAAAGAAAAACGGCTACCTTCAGGATATTTGGTCATAA	2176

RESULT 3
US-08-905-223-71
; Sequence 71, Application US/08905223
; Patent No. 622029
; GENERAL INFORMATION:
; APPLICANT: Edwards, Jean-Baptiste D
; APPLICANT: Duelt, Aymeric

APPLICANT: Lacroix, Bruno
TITLE OF INVENTION: 5' ESTS FOR SECRETED PROTEINS
NUMBER OF SEQUENCES: 503
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-3505
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy Disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Win95
SOFTWARE: Word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/905,223
FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Israel, Ned A.
REGISTRATION NUMBER: 29,655
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 235-8550
TELEFAX: (619) 235-0176
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 390 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: DOUBLE
TOPOLOGY: LINEAR
MOLECULE TYPE: CDNA
ORIGINAL SOURCE:
ORGANISM: Homo Sapiens
TISSUE TYPE: Brain
FEATURE:
NAME/KEY: sig_peptide
LOCATION: 289..357
IDENTIFICATION METHOD: Von Heijne matrix
OTHER INFORMATION: score 6.9
OTHER INFORMATION: seq SL5LLASHHSVSC/SN
US-08-905-223-71

Query Match 18.4%; Score 386.4; DB 3; Length 390;
Best Local Similarity 99.7%; Pred. No. 7.9e-123;
Matches 387; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 968 AGGTACAAAGCCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGGCTCTTT 1027
Db 1 AGGTACAAAGCCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGGCTCTTT 60

QY 1028 TGAATAAAGGCAGACACAAAGAAAGAGGAGCTACCTTACCCAGCATATACCTGCGG 1087
Db 61 TGAATAAAGGCAGACACAAAGAAAGAGGAGCTACCTTACCCAGCATATACCTGCGG 120

QY 1088 GATGTTCTCCAGTTCATTTTACCTGGTGCTTGAATCCGAGCAATTCCTAAAGG 1147
Db 121 GATGTTCTCCAGTTCATTTTACCTGGTGCTTGAATCCGAGCAATTCCTAAAGG 180

QY 1148 CATTTTGGAGCCCTTGTGGACTATACAGTCACAGTGTGAAAGCGCAGGTACAGG 1207
Db 181 CATTTTGGAGCCCTTGTGGACTATACAGTCACAGTGTGAAAGCGCAGGTACAGG 240

QY 1208 AGCTGTGCAGTAACAAAGGGGAGCCGATATAGCCGCTTTGTACGAGATGCTGTGCCT 1267
Db 241 AGCTGTGCAGTAACAAAGGGGAGCCGATATAGCCGCTTTGTACGAGATGCTGTGCCT 300

QY 1268 GCTTGTGGATCTCCTCCTCGCTTTCCTTCTTGGCCAGCCACCACTCAGTCTCCTGCTG 1327
Db 301 GCTTGTGGATCTCCTCCTCGCTTTCCTTCTTGGCCAGCCACCACTCAGTCTCCTGCTG 360

QY 1328 AACATCTTCTCTAACTTCAACCCAGACC 1355

Db 361 RACATCTTCTTAACCTTCAACCCAGACC 388

RESULT 4
US-09-949-016-150019
Sequence 150019, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq For Windows Version 4.0
SEQ ID NO 150019
LENGTH: 601
TYPE: DNA
ORGANISM: Human
US-09-949-016-150019

Query Match 18.1%; Score 380.6; DB 4; Length 601;
Best Local Similarity 99.7%; Pred. No. 1.1e-120;
Matches 380; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGTGAGCGGTGGATTGCTGGACTCTGCGCAGCCCTCAGAAAGCAT 460
Db 178 GTTTAGAACTTGTGTGAGCGGTGGATTGCTGGACTCTGCGCAGCCCTCAGAAAGCAT 237

QY 461 TTAGTCTCAGCAGAGGAGGAGTAAGTGCGCACTCCCGGTGGCATCACCTGCAT 520
Db 238 TTAGTCTCAGCAGAGGAGGAGTAAGTGCGCACTCCCGGTGGCATCACCTGCAT 297

QY 521 CTTTGAGGACAGACCTTGTGAACTCAGAGCTCTACACATTTGAATCTCAAGTCGAGCTTC 580
Db 298 CTTTGAGGACAGACCTTGTGAACTCAGAGCTCTACACATTTGAATCTCAAGTCGAGCTTC 357

QY 581 TGAGATTGATGATTCAGAGAAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACA 640
Db 358 TGAGATTGATGATTCAGAGAAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACA 417

QY 641 GCAACCAATCCCAATGTTGTAATTGAAGACTTTTGAGTCTCCTACCTACCCGTTCCGTACCCC 700
Db 418 GCAACCAATCCCAATGTTGTAATTGAAGACTTTTGAGTCTCCTACCTACCCGTTCCGTACCCC 477

QY 701 CACTCTCAACGCTCTCTGAAATTTCTGGTTTACCCCCAGAAATTTTACAGGTACATC 760
Db 478 CACTCTCAACGCTCTCTGAAATTTCTGGTTTACCCCCAGAAATTTTACAGGTACATC 537

QY 761 TGCAGAGTCTCTTGGCCAGG 781
Db 538 TGCAGAGTCTCTTGGCCAGG 558

RESULT 5
US-09-949-016-15957
Sequence 15957, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14

; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15957
; LENGTH: 35916
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-15957

Query Match
Best Local Similarity 18.1%; Score 379.4; DB 4; Length 35916;
Matches 380; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGGTTGAGCCGTGGATTGCTGGACTCTGGCCAGGCCCTCAGAAAGCATT 460
DB 10781 GTTTAGAACTTGTGGTTGAGCCGTGGATTGCTGGACTCTGGCCAGGCCCTCAGAAAGCATT 10840

QY 461 TTAGGTCAAGCAGAGACAAGAGGAGATAAGTGGGCGCACTCCGGTGGGCATCACCTGCAT 520
DB 10841 TTAGGTCAAGCAGAGACAAGAGGAGATAAGTGGGCGCACTCCGGTGGGCATCACCTGCAT 10900

QY 521 CCTGAGGACAGACCTTGTGAAGTCTCAGAGCTGCTCACATTTGAATCTCAAGTCGAGCTTC 580
DB 10901 CCTGAGGACAGACCTTGTGAAGTCTCAGAGCTGCTCACATTTGAATCTCAAGTCGAGCTTC 10960

QY 581 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATGCAAGTGAACA 640
DB 10961 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATGCAAGTGAACA 11020

QY 641 GCAACCAATCCCAATGTTGAATTTGAAGACTTTGAGTCTCACTACCCGTTCCGTACCC 700
DB 11021 GCAACCAATCCCAATGTTGAATTTGAAGACTTTGAGTCTCACTACCCGTTCCGTACCC 11080

QY 701 CACTCTCAAGCTCTCTGAATATTCCTGGTTTACCCCGCAGATATTTACAGGTACATC 760
DB 11081 CACTCTCAAGCTCTCTGAATATTCCTGGTTTACCCCGCAGATATTTACAGGTACATC 11140

QY 761 TGCAGAGTCTCTTGGCCAGG 781
DB 11141 TGCAGAGTCTCTTGGCCAGG 11161

RESULT 6
US-09-949-016-150020
; Sequence 150020, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150020
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150020

Query Match
Best Local Similarity 18.1%; Score 379; DB 4; Length 601;
Matches 379; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Best Local Similarity 99.5%; Pred. No. 4.1e-120;
Matches 379; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGGTTGAGCCGTGGATTGCTGGACTCTGGCCAGGCCCTCAGAAAGCATT 460
DB 165 GTTTAGAACTTGTGGTTGAGCCGTGGATTGCTGGACTCTGGCCAGGCCCTCAGAAAGCATT 224

QY 461 TTAGGTCAAGCAGAGACAAGAGGAGATAAGTGGGCGCACTCCGGTGGGCATCACCTGCAT 520
DB 225 TTAGGTCAAGCAGAGACAAGAGGAGATAAGTGGGCGCACTCCGGTGGGCATCACCTGCAT 284

QY 521 CCTGAGGACAGACCTTGTGAAGTCTCAGAGCTGCTCACATTTGAATCTCAAGTCGAGCTTC 580
DB 285 CCTGAGGACAGACCTTGTGAAGTCTCAGAGCTGCTCACATTTGAATCTCAAGTCGAGCTTC 344

QY 581 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATGCAAGTGAACA 640
DB 345 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATGCAAGTGAACA 404

QY 641 GCAACCAATCCCAATGTTGAATTTGAAGACTTTGAGTCTCACTACCCGTTCCGTACCC 700
DB 405 GCAACCAATCCCAATGTTGAATTTGAAGACTTTGAGTCTCACTACCCGTTCCGTACCC 464

QY 701 CACTCTCAAGCTCTCTGAATATTCCTGGTTTACCCCGCAGATATTTACAGGTACATC 760
DB 465 CACTCTCAAGCTCTCTGAATATTCCTGGTTTACCCCGCAGATATTTACAGGTACATC 524

QY 761 TGCAGAGTCTCTTGGCCAGG 781
DB 525 TGCAGAGTCTCTTGGCCAGG 545

RESULT 7
US-09-949-016-150037
; Sequence 150037, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150037
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150037

Query Match
Best Local Similarity 9.1%; Score 190.4; DB 4; Length 601;
Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1369 AGCTCAAGTTTATTTACCCAGGAAGCTCCATTGTTGTTTCAACATTTGGAAATTCGTG 1428
DB 18 AGCTCAAGTTTATTTACCCAGGAAGCTCCATTGTTGTTTCAACATTTGGAAATTCGTG 77

QY 1429 TCTACTGCCACACAGAGAGTTCTCGGAAGGAGATGATGACAGGCTGGCTTGTTG 1488
DB 78 TCTACTGCCACACAGAGAGTTCTCGGAAGGAGATGATGACAGGCTGGCTTGTTG 137

QY 1489 GTTGCTTCAGTTCTTCAGCCAAACATACATGATGCCATCCATGAAGACAGCGGGAAGCCCTG 1548
DB 138 GTTGCTTCAGTTCTTCAGCCAAACATACATGATGCCATCCATGAAGACAGCGGGAAGCCCTG 197

Patent No. 682888
GENERAL INFORMATION:
APPLICANT: Loring, Jeanne F.
APPLICANT: Tingley, Debora W.
APPLICANT: Edwards, Carla M.
TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE
FILE REFERENCE: PA-0024 US
CURRENT APPLICATION NUMBER: US/09/566,921
CURRENT FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 138
SOFTWARE: PERL Program
SEQ ID NO 88
LENGTH: 2475
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. 6682888 255828.26
NAME/KEY: unsure
LOCATION: 1001, 1011
OTHER INFORMATION: a, t, c, g, or other
US-09-566-921-88

Query Match 8.3%; Score 174.4; DB 4; Length 2475;
Best Local Similarity 96.7%; Pred. No. 1.2e-48; Indels 0; Gaps 0;
Matches 178; Conservative 0; Mismatches 6;
QY 510 ATCACTGTCATCTTGAGGACAGACCTTGTAAGTCAGAGCTGCTACACATTGAATCTCA 569
Db 1 ATCACTGTCATCTCGAGACAGACCTTGTAAGTCAGAGCTGCTACACATTGAATCTCA 60
QY 570 AGTCAGCTTCTGAGATTCGATTCAGGAAAGGATTCGAGTTTGAAGCAAAA 629
Db 61 AGTCAGCTTCTGAGATTCGATTCAGGAAAGGATTCGAGTTTGAAGCAAAA 120
QY 630 TCGAGTGAACAGCAACCAATGTTGTAATGGAAGCTTTGAGTCTCACTACCG 689
Db 121 TCGAGTGAACAGCAACCAATGTTGTAATGGAAGCTTTGAGTCTCACTACCG 180
QY 690 TTCC 693
Db 181 TTCC 184

RESULT 12
US-09-016-150030
Sequence 150030, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 150030
LENGTH: 601
TYPE: DNA
ORGANISM: Human
US-09-949-016-150030

Query Match 7.4%; Score 155.2; DB 4; Length 601;
Best Local Similarity 98.1%; Pred. No. 1.7e-42; Indels 0; Gaps 0;
Matches 157; Conservative 0; Mismatches 3;

QY 899 TTTCAAATACAGACTTTTCCTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACA 958
Db 315 TCTAGAATACAGACTTTTCCTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACA 374
QY 959 GTGATTCTGAGGTACAAAGCCTTACTCCAAAGACTCGAGCTTCAAGATATAAAGAGAGCACT 1018
Db 375 GTGATTCTGAGGTACAAAGCCTTACTCCAAAGACTCGAGCTTCAAGATATAAAGAGAGCACT 434
QY 1019 GCGTCTTTTGAATAAAGGCAGACACAAAGAGAAAGG 1058
Db 435 GCGTCTTTTGAATAAAGGCAGACACAAAGAGAAAGG 474

RESULT 13
US-09-949-016-150031
Sequence 150031, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 150031
LENGTH: 601
TYPE: DNA
ORGANISM: Human
US-09-949-016-150031

Query Match 7.4%; Score 154.8; DB 4; Length 601;
Best Local Similarity 97.5%; Pred. No. 2.4e-42; Indels 0; Gaps 0;
Matches 156; Conservative 1; Mismatches 3;
QY 899 TTTCAAATACAGACTTTTCCTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACA 958
Db 151 TCTAGAATACAGACTTTTCCTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACA 210
QY 959 GTGATTCTGAGGTACAAAGCCTTACTCCAAAGACTCGAGCTTCAAGATATAAAGAGAGCACT 1018
Db 211 GTGATTCTGAGGTACAAAGCCTTACTCCAAAGACTCGAGCTTCAAGATATAAAGAGAGCACT 270
QY 1019 GCGTCTTTTGAATAAAGGCAGACACAAAGAGAAAGG 1058
Db 271 GCGTCTTTTGAATAAAGGCAGACACAAAGAGAAAGG 310

RESULT 14
US-09-471-276-495
Sequence 495, Application US/09471276
Patent No. 6822072
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
FILE REFERENCE: GENSET.025CPI
CURRENT APPLICATION NUMBER: US/09/471,276
CURRENT FILING DATE: 1999-12-21
EARLIER APPLICATION NUMBER: 09/057,719
EARLIER FILING DATE: 1998-04-09
EARLIER APPLICATION NUMBER: 09/069,047
EARLIER FILING DATE: 1998-04-28
EARLIER APPLICATION NUMBER: PCT/IB99/00712

; EARLIER FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1622
; SOFTWARE: Patent.pm
; SEQ ID NO 495
; LENGTH: 244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 70..243
; NAME/KEY: sig_peptide
; LOCATION: 70..114
; OTHER INFORMATION: Von Heijne matrix
; OTHER INFORMATION: score 4.4000009536743
; OTHER INFORMATION: seq RFLLYATQGGQA/KA
US-09-471-276-495

Query Match 6.2%; Score 129.2; DB 4; Length 244;
Best Local Similarity 87.5%; Pred. No. 8.6e-34;
Matches 140; Conservative 1; Mismatches 19; Indels 0; Gaps 0;

QY 1 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGGACAGGCAAGGCCATCGCAGAA 60
DB 70 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGGACAGGCAAGGCCATCGCAGAA 129

QY 61 GAAATATGTGACAGCTGTGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
DB 130 GAAATGTGTGACAGCTGTGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 189

QY 121 TCCGATAAGTATGACCTAAACCGAAACAGCTCTCTTTG 160
DB 190 TCCGATAAGTCTCGGTGATTCCAGAAATACACCTACTTTTG 229

RESULT 15
US-09-949-016-150007
; Sequence 150007, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150007
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150007

Query Match 6.1%; Score 128.6; DB 4; Length 601;
Best Local Similarity 99.2%; Pred. No. 2.9e-33;
Matches 128; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGGACAGGCAAGGCCATCGCAGAA 60
DB 236 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGGACAGGCAAGGCCATCGCAGAA 295

QY 61 GAAATATGTGACAGCTGTGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
DB 296 GAAATRTGTGACAGCTGTGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 355

QY 121 TCCGATAAG 129
|||||

Db 356 TCCGATAAG 364

Search completed: November 8, 2005, 17:00:50
Job time : 237.757 secs

QY 1 ATGAGAGGTTTCTGTTACTATATGCTACACAGCAGGACAGCAAGGCCATCGCAGAA 60
DB 1 ATGAGAGGTTTCTGTTACTATATGCTACACAGCAGGACAGCAAGGCCATCGCAGAA 60
QY 61 GAAATATGTGACCAAGCTGTGGTACATGGATTTCTGACAGATCTTCACTGTATTAGTGAA 120
DB 61 GAAATATGTGACCAAGCTGTGGTACATGGATTTCTGACAGATCTTCACTGTATTAGTGAA 120
QY 121 TCCGATAGTATGACCTAAAAACCGAAGCAGCTCCTCTTGTGTTGTGGTTTCTACCAG 180
DB 121 TCCGATAGTATGACCTAAAAACCGAAGCAGCTCCTCTTGTGTTGTGGTTTCTACCAG 180
QY 181 GGCACGAGAGACCCACCGACACAGCCGCAAGTTGTTAAGAAATACAGAACCAAAACA 240
DB 181 GGCACGAGAGACCCACCGACACAGCCGCAAGTTGTTAAGAAATACAGAACCAAAACA 240
QY 241 CTGCCGGTTGATTTCTTTTGCTCACCTGCGGTATGGGTTACTGGGTTCTGGTGATTAGAA 300
DB 241 CTGCCGGTTGATTTCTTTTGCTCACCTGCGGTATGGGTTACTGGGTTCTGGTGATTAGAA 300
QY 301 TACACCTACTTTGCAATGGGGGGAAGATAAATGATAAAGCAGCTTCAAGAGCTTGGAGCC 360
DB 301 TACACCTACTTTGCAATGGGGGGAAGATAAATGATAAAGCAGCTTCAAGAGCTTGGAGCC 360
QY 361 CGGCATTTCTATGACACTGGACATGACATGATGACTGTAGGTTTAGAACTTGTGGTTGAG 420
DB 361 CGGCATTTCTATGACACTGGACATGACATGATGACTGTAGGTTTAGAACTTGTGGTTGAG 420
QY 421 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTTCAAGCAGAGACAA 480
DB 421 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTTCAAGCAGAGACAA 480
QY 481 GAGGAGATTAAGTGGGCGCATCCGGTGGCATCACCTGCGATCCTTGAGGACAGACCTTGTG 540
DB 481 GAGGAGATTAAGTGGGCGCATCCGGTGGCATCACCTGCGATCCTTGAGGACAGACCTTGTG 540
QY 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
DB 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
QY 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAATGTTGTA 660
DB 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAATGTTGTA 660
QY 661 ATTGAAGCTTTGAGTCTCTACCTTACCGTTCCGTTACCGTACCGTCTCTCAAGGCTCTCTG 720
DB 661 ATTGAAGCTTTGAGTCTCTACCTTACCGTTCCGTTACCGTACCGTCTCTCAAGGCTCTCTG 720
QY 721 AATATTCCTGGTTTACCCCGCAGAAATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
DB 721 AATATTCCTGGTTTACCCCGCAGAAATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCTCAATTTCAAAG 840
DB 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCTCAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGTCATAAAAACCACTCTGCTGTGTAGAAATGGACATT 900
DB 841 GCAGTTCAACTTACTACGAATGATGTCATAAAAACCACTCTGCTGTGTAGAAATGGACATT 900
QY 901 TCAATATACAGACTTTTCTTATCAGCTGGAGATGCTTCAAGCTGATCTGCCCTAACAGT 960
DB 901 TCAATATACAGACTTTTCTTATCAGCTGGAGATGCTTCAAGCTGATCTGCCCTAACAGT 960
QY 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAAGAGACACTGC 1020
DB 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAAGAGACACTGC 1020
QY 1021 GTCCCTTTGAAATTAAGGAGACACAAAGAGAAAGGAGCTACCTTACCCAGCATATA 1080
DB 1021 GTCCCTTTGAAATTAAGGAGACACAAAGAGAAAGGAGCTACCTTACCCAGCATATA 1080
QY 1081 CTGCGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140

DB 1081 CTGCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
QY 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGGACTATACCAAGTACAGTGTGAAAAGGCGCAGG 1200
DB 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGGACTATACCAAGTACAGTGTGAAAAGGCGCAGG 1200
QY 1201 CTACAGGAGCTGTGAGTAAACAAGGGGACGCCGATATAGCCGCTTTGTACGAGATGCC 1260
DB 1201 CTACAGGAGCTGTGAGTAAACAAGGGGACGCCGATATAGCCGCTTTGTACGAGATGCC 1260
QY 1261 TGTGCTCTGTTGTTGGATCTCCTCTCGCTTTCCCTTCTTGGCCAGCCACCTCAAGTCTC 1320
DB 1261 TGTGCTCTGTTGTTGGATCTCCTCTCGCTTTCCCTTCTTGGCCAGCCACCTCAAGTCTC 1320
QY 1321 CTGCTCGAACAATCTTCTAAACCTTCAAGCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
DB 1321 CTGCTCGAACAATCTTCTAAACCTTCAAGCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
QY 1381 TTTTACCAGGAAAGCTCCATTTTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
DB 1381 TTTTACCAGGAAAGCTCCATTTTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGGTTTTCGCGAAGGGAGTATGTACAGGCTGGCTGGCCCTTGTGTGCTTCAAGTT 1500
DB 1441 ACAGAGGTTTTCGCGAAGGGAGTATGTACAGGCTGGCTGGCCCTTGTGTGCTTCAAGTT 1500
QY 1501 CTTAGCCAAACATACATGCATCCCATGAAGACAGCGGGAAGCCCTGGCTCTAAGATA 1560
DB 1501 CTTAGCCAAACATACATGCATCCCATGAAGACAGCGGGAAGCCCTGGCTCTAAGATA 1560
QY 1561 TCCATCTCTCTCGAACAACAATTTTCCATTTACAGATGACCCCTCAATCCCATC 1620
DB 1561 TCCATCTCTCTCGAACAACAATTTTCCATTTACAGATGACCCCTCAATCCCATC 1620
QY 1621 AATAAGTGGGTTCAGGAAACCGGCATAGCCCGTTTATTTGGGTTTCTTACAAATAGAGAG 1680
DB 1621 AATAAGTGGGTTCAGGAAACCGGCATAGCCCGTTTATTTGGGTTTCTTACAAATAGAGAG 1680
QY 1681 AAATCCCAAGAACCAACCCAGATGGAAATTTTGGAGCAATGTGGTTGTTTTTGGCTGC 1740
DB 1681 AAATCCCAAGAACCAACCCAGATGGAAATTTTGGAGCAATGTGGTTGTTTTTGGCTGC 1740
QY 1741 AGGCATAGGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTTCTTAAAGCATGGG 1800
DB 1741 AGGCATAGGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTTCTTAAAGCATGGG 1800
QY 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTTCTTGGGAGGAGGAAGCC 1860
DB 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTTCTTGGGAGGAGGAAGCC 1860
QY 1861 CCAGCAAGTATGTACAGAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCTCTC 1920
DB 1861 CCAGCAAGTATGTACAGAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCTCTC 1920
QY 1921 CTCACGAGAACCGGCATATTTATGTGTGAGATGCAAGATATATGSCCAAGGATGTA 1980
DB 1921 CTCACGAGAACCGGCATATTTATGTGTGAGATGCAAGATATATGSCCAAGGATGTA 1980
QY 1981 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTTGGAGTTTGAAGGCAATG 2040
DB 1981 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTTGGAGTTTGAAGGCAATG 2040
QY 2041 AAAACCTTGGCCACTTTTAAAGAGAAACCGCTACCTTCAGGATATTTGGTGCATAA 2097
DB 2041 AAAACCTTGGCCACTTTTAAAGAGAAACCGCTACCTTCAGGATATTTGGTGCATAA 2097

RESULT 2
US-11-119-096-41
; Sequence 41, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:

APPLICANT: Gravel, Roy A,
APPLICANT: Rozen, Rima
APPLICANT: Leclerc, Daniel
APPLICANT: Wilson, Aaron
APPLICANT: Rosenblatt, David
TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
FILE REFERENCE: 50004/003005
CURRENT APPLICATION NUMBER: US/11/119,096
CURRENT FILING DATE: 2005-04-29
PRIOR APPLICATION NUMBER: 09/487,841
PRIOR FILING DATE: 2000-01-19
PRIOR APPLICATION NUMBER: 09/371,347
PRIOR FILING DATE: 1999-08-10
PRIOR APPLICATION NUMBER: 09/232,028
PRIOR FILING DATE: 1999-01-15
PRIOR APPLICATION NUMBER: 60/071,622
PRIOR FILING DATE: 1998-01-16
NUMBER OF SEQ ID NOS: 63
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 41
LENGTH: 2097
TYPE: DNA
ORGANISM: Homo sapiens
US-11-119-096-41

Query Match		100.0%; Score 2097; DB 26; Length 2097;		
Best Local Similarity		100.0%; Pred. No. 0;		
Matches 2097; Conservative		0; Mismatches 0; Indels 0; Gaps 0;		
QY	1	ATGAGGAGTTCTGTTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA	60	
DB	1	ATGAGGAGTTCTGTTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA	60	
QY	61	GAATATGTGAGCAAGCTGTGTACATGATGATTTTCGAGATCTTCACATGATTTAGTGAA	120	
DB	61	GAATATGTGAGCAAGCTGTGTACATGATGATTTTCGAGATCTTCACATGATTTAGTGAA	120	
QY	121	TCGGATAAGTATGACCTAAACCCGAAACAGCTCTCTGTTGTTGTTGTTGTTTACCCAG	180	
DB	121	TCGGATAAGTATGACCTAAACCCGAAACAGCTCTCTGTTGTTGTTGTTTCTACCCAG	180	
QY	181	GGCACCAGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAACA	240	
DB	181	GGCACCAGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAACA	240	
QY	241	CTGCCGGTTGATTTCTTTGCTACCTGCGGTATGGGTTACTGGGTCTCGGTGATTCAGAA	300	
DB	241	CTGCCGGTTGATTTCTTTGCTACCTGCGGTATGGGTTACTGGGTCTCGGTGATTCAGAA	300	
QY	301	TACACCTACTTTTGGCAATGGGGGAGATTAATGATAACGACTTCAAGAGCTTGGAGCC	360	
DB	301	TACACCTACTTTTGGCAATGGGGGAGATTAATGATAACGACTTCAAGAGCTTGGAGCC	360	
QY	361	CGGCATTTCTATGACACTGGACATGACATGATGTTAGAGTTTGTAGTTTGTGTTGAG	420	
DB	361	CGGCATTTCTATGACACTGGACATGACATGATGTTAGAGTTTGTAGTTTGTGTTGAG	420	
QY	421	CCGTGGAATGCTGGACTTGGCCAGCCCTCAGAAAGCAATTTAGGTCAAGCAGAGACAA	480	
DB	421	CCGTGGAATGCTGGACTTGGCCAGCCCTCAGAAAGCAATTTAGGTCAAGCAGAGACAA	480	
QY	481	GAGGAGATAGTGGCCGACTCCCGGTGGCATCACCTGTCCTTTGAGGACAGACCTTGTG	540	
DB	481	GAGGAGATAGTGGCCGACTCCCGGTGGCATCACCTGTCCTTTGAGGACAGACCTTGTG	540	
QY	541	NAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600	
DB	541	NAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600	
QY	601	AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCATGTTGTA	660	
DB	601	AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCATGTTGTA	660	

DB	601	AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCATGTTGTA	660	
QY	661	ATTGAAGACTTTGAGTCTTCACTTACCCGTTCCGTTACCCCTCTCTCAAGCCTCTCTG	720	
DB	661	ATTGAAGACTTTGAGTCTTCACTTACCCGTTCCGTTACCCCTCTCTCAAGCCTCTCTG	720	
QY	721	AATATTTCTGGTTTACCCCAAGATATTTTACAGGTATCATCTGCGAGGATCTCTTGGCCAG	780	
DB	721	AATATTTCTGGTTTACCCCAAGATATTTTACAGGTATCATCTGCGAGGATCTCTTGGCCAG	780	
QY	781	GAGGAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAAG	840	
DB	781	GAGGAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAAG	840	
QY	841	GCAGTTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTCTGCTGTAGAAATTTGGACAT	900	
DB	841	GCAGTTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTCTGCTGTAGAAATTTGGACAT	900	
QY	901	TCAATATACAGACTTTTCTTATCAGCTTGAGATGCTTCAGCGTGATCTGCCCTTAACAGT	960	
DB	901	TCAATATACAGACTTTTCTTATCAGCTTGAGATGCTTCAGCGTGATCTGCCCTTAACAGT	960	
QY	961	GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCACTTGAAGATAAAAGAGAGCACTGC	1020	
DB	961	GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCACTTGAAGATAAAAGAGAGCACTGC	1020	
QY	1021	GTCTTTTGAATAAAGGACAGACACAAAGAGAGAGGAGCTACCTTACCCAGCATATA	1080	
DB	1021	GTCTTTTGAATAAAGGACAGACACAAAGAGAGAGGAGCTACCTTACCCAGCATATA	1080	
QY	1081	CTGCGGAGTGTCTCTCAGTTTCAATTTTACCTGCTGTTGAAATCCGAGCAATTCCT	1140	
DB	1081	CTGCGGAGTGTCTCTCAGTTTCAATTTTACCTGCTGTTGAAATCCGAGCAATTCCT	1140	
QY	1141	AAAAAGGCAATTTTGGGAGCCTTGGAGCTATACCAAGTACAGTCTGCAAGAGCCAGG	1200	
DB	1141	AAAAAGGCAATTTTGGGAGCCTTGGAGCTATACCAAGTACAGTCTGCAAGAGCCAGG	1200	
QY	1201	CTACAGGAGCTGTGCAAGTAAACAAAGGGGAGCGGATATAGCGCTTGTACAGATGCC	1260	
DB	1201	CTACAGGAGCTGTGCAAGTAAACAAAGGGGAGCGGATATAGCGCTTGTACAGATGCC	1260	
QY	1261	TGTGCTGTCTGTTGGATCTCTCTGCTTCCCTTCTTTCGAGCCACCACTCACTGTC	1320	
DB	1261	TGTGCTGTCTGTTGGATCTCTCTGCTTCCCTTCTTTCGAGCCACCACTCACTGTC	1320	
QY	1321	CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380	
DB	1321	CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380	
QY	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGCTACTGCCACA	1440	
DB	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGCTACTGCCACA	1440	
QY	1441	ACAGAGTTTCTGCGAAGGGAGTATGTAACGGTGTGCTGGCTTGTGTTGTTGTTGTT	1500	
DB	1441	ACAGAGTTTCTGCGAAGGGAGTATGTAACGGTGTGCTGGCTTGTGTTGTTGTTGTT	1500	
QY	1501	CTTCAGCCAAACATACATGATCCCATGAGACGCGGAGAAAGCCCTGCTCTTAAGATA	1560	
DB	1501	CTTCAGCCAAACATACATGATCCCATGAGACGCGGAGAAAGCCCTGCTCTTAAGATA	1560	
QY	1561	TCATCTCTCTCGAACAACAAATTTCTTCCACTTACCAAGTACGCCCTCAATCCCATC	1620	
DB	1561	TCATCTCTCTCGAACAACAAATTTCTTCCACTTACCAAGTACGCCCTCAATCCCATC	1620	
QY	1621	ATAATGGTGGGTCCAGGAAACCGGCATAGCCCGTTTATTTGGGTTCTTCAACATAGAG	1680	
DB	1621	ATAATGGTGGGTCCAGGAAACCGGCATAGCCCGTTTATTTGGGTTCTTCAACATAGAG	1680	
QY	1681	AAATCTCAAGAAACACACCCAGATGGAATTTTGGAGCAATGTTGTTGTTTGGCTGC	1740	
DB	1681	AAATCTCAAGAAACACACCCAGATGGAATTTTGGAGCAATGTTGTTGTTTGGCTGC	1740	

Qy	1741	AGGCATAAGGATAGGGATTATCTATTCAGAAAAAGAGCTCAGACATTTTCCTTTAAGCATGGG	1800
Db	1741	AGGCATAAGGATAGGGATTATCTATTTAGAAAAAGAGCTCAGACATTTTCCTTTAAGCATGGG	1800
Qy	1801	ATCTTAACTCATCTAAGAGTTTCCTTCTCAAGAGATGCTCCTGTGGGAGGAGGAAGCC	1860
Db	1801	ATCTTAACTCATCTAAGAGTTTCCTTCTCAAGAGATGCTCCTGTGGGAGGAGGAAGCC	1860
Qy	1861	CCAGCAAAGATATGTATCAAGACAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAAATCCTC	1920
Db	1861	CCAGCAAAGATATGTATCAAGACAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAAATCCTC	1920
Qy	1921	CTCCAGAGAAACGGCCATATTTATGTGTGGAGATGCAAAAGATATGGCCAGGATGTA	1980
Db	1921	CTCCAGAGAAACGGCCATATTTATGTGTGGAGATGCAAAAGATATGGCCAGGATGTA	1980
Qy	1981	CATGATCCCTTGTGCAAAATAATAAGCAAGAGGTTGGAGTTGAAAAACTAGAAAGCAATG	2040
Db	1981	CATGATCCCTTGTGCAAAATAATAAGCAAGAGGTTGGAGTTGAAAAACTAGAAAGCAATG	2040
Qy	2041	AAAAACCTGGCCACTTTTAAAAAGAAAAACGGTACCTTCAGGATATTTGGTCAATAA	2097
Db	2041	AAAAACCTGGCCACTTTTAAAAAGAAAAACGGTACCTTCAGGATATTTGGTCAATAA	2097
RESULT 3			
US-09-371-347-1			
; Sequence 1, Application US/09371347			
; Publication No. US20030082676A1			
; GENERAL INFORMATION:			
; APPLICANT: Roy A. Gravel et al.			
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:			
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE			
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER			
; FILE REFERENCE: 50004/003003			
; CURRENT APPLICATION NUMBER: US/09/371,347			
; CURRENT FILING DATE: 1999-08-10			
; PRIOR APPLICATION NUMBER: 60/071,622			
; PRIOR FILING DATE: 1998-01-16			
; PRIOR APPLICATION NUMBER: 09/232,028			
; PRIOR FILING DATE: 1999-01-15			
; NUMBER OF SEQ ID NOS: 51			
; SOFTWARE: FastSeq for Windows Version 4.0			
; SEQ ID NO 1			
; LENGTH: 2097			
; TYPE: DNA			
; ORGANISM: Homo sapiens			
US-09-371-347-1			
Query Match 99.9%; Score 2095.4; DB 10; Length 2097;			
Best Local Similarity 100.0%; Pred.No.0;			
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;			
Qy	1	ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA	60
Db	1	ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA	60
Qy	61	GAATAATATGTCAGCAAGCTGTGGTACATCGATTTTCTGCAGATCTTCACTGTATTAGTGA	120
Db	61	GAATGTGTGAGCAAGCTGTGGTACATCGATTTTCTGCAGATCTTCACTGTATTAGTGA	120
Qy	121	TCCGATATGATGACCTTAAACCGAAACAGCTCCTCTGTGTGTGTGTGTGTCTTACACAG	180
Db	121	TCCGATATGATGACCTTAAACCGAAACAGCTCCTCTGTGTGTGTGTGTGTCTTACACAG	180
Qy	181	GGCACCGGAGACCCACCGCACAGCCGCAAGTTTGTTAGGAAATACAGAAACCAACA	240
Db	181	GGCACCGGAGACCCACCGCACAGCCGCAAGTTTGTTAGGAAATACAGAAACCAACA	240
Qy	241	CTGCCGTTGATTTCTTTTGCTCACTCGGTPATGGGTACTGGGTCTCGGTGATTCAGAA	300
Db	241	CTGCCGTTGATTTCTTTTGCTCACTCGGTPATGGGTACTGGGTCTCGGTGATTCAGAA	300

Db 901 TCAATACAGACTTTTCCTATCAGCCTGGAGATGCCTTCAGCGTGATCTGCCTAACAGT 960
Qy 961 GATTTGAGGTCAAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAGAGAGAGACTGC 1020
Db 961 GATTTGAGGTCAAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAGAGAGAGACTGC 1020
Qy 1021 GTCCCTTTCAAAATAAAGCAGACACAAAGAGAAAGAGAGCTACCTTACCCAGCATATA 1080
Db 1021 GTCCCTTTGAAATAAAGCGAGACACAAAGAGAAAGAGAGCTACCTTACCCAGCATATA 1080
Qy 1081 CTGCGGGATGTTCTCTCCAGTTTCATTTTACCTGGTGCTTGAATCCGAGCAATTCCT 1140
Db 1081 CTGCGGGATGTTCTCTCCAGTTTCATTTTACCTGGTGCTTGAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCATTTTGGAGCCCTTGGGACTATACAGTGACAGTGCTGCTGAAAAGCGCAGG 1200
Db 1141 AAAAAGGCATTTTGGAGCCCTTGGGACTATACAGTGACAGTGCTGCTGAAAAGCGCAGG 1200
Qy 1201 CTACAGGAGCTGTGCAGTAAACAAGGGGAGCGGATTAAGCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGCAGTAAACAAGGGGAGCGGATTAAGCGCTTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTGTTGTGATCTCTCTCGCTTTCCCTTTCTTGCCAGCCACCTCAGTCTC 1320
Db 1261 TGTGCTGCTGTTGTGATCTCTCTCGCTTTCCCTTTCTTGCCAGCCACCTCAGTCTC 1320
Qy 1321 CTGCTGCAACATCTTCTTAACTTCAACCCAGACCATATTCGTGCGAAGCTCAAGTTTA 1380
Db 1321 CTGCTGCAACATCTTCTTAACTTCAACCCAGACCATATTCGTGCGAAGCTCAAGTTTA 1380
Qy 1381 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGCTACTGCCACA 1440
Db 1381 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGCTACTGCCACA 1440
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Db 1441 ACAGAGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTTGTTGTTGTTGCTCAGTT 1500
Qy 1501 CTTTACGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGGCTCTCAAGATA 1560
Db 1501 CTTTACGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGGCTCTCAAGATA 1560
Qy 1561 TCCATCTCTCTCGAACAAATCTTCTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAAATCTTCTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
Qy 1621 ATAAATGGTGGTCCAGGAACCGGCATAGCCCGCTTTATTGGGTTCTTACAAACATAGAG 1680
Db 1621 ATAAATGGTGGTCCAGGAACCGGCATAGCCCGCTTTATTGGGTTCTTACAAACATAGAG 1680
Qy 1681 AAACCTCAAAGAACACACCCAGATGGAATTTTGGAGCAATGTTGTTGTTTGGCTGC 1740
Db 1681 AAACCTCAAAGAACACACCCAGATGGAATTTTGGAGCAATGTTGTTGTTTGGCTGC 1740
Qy 1741 AGGCATAAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db 1741 AGGCATAAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Qy 1801 ATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCC 1860
Db 1801 ATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCC 1860
Qy 1861 CAGCAAGATGATGACAAACATCCAGCTTCTGCGCAGCAGCAGTGGGGAATTCCTC 1920
Db 1861 CAGCAAGATGATGACAAACATCCAGCTTCTGCGCAGCAGCAGTGGGGAATTCCTC 1920
Qy 1921 CTTCCAGGAGACGGCCATTTATGTTGTGGAGATGCAAAAGATATGSCCAAGGATGA 1980
Db 1921 CTTCCAGGAGACGGCCATTTATGTTGTGGAGATGCAAAAGATATGSCCAAGGATGA 1980
Qy 1981 CATGATGCCCTTGTGCAAAATAATAAGCAAGAGGTTGGAGTTGGAATTCAGATTCAGGA 2040

Db 1981 CATGATGCCCTTGTGCAAAATAATAAGCAAGAGGTTGGAGTTGAAAAAATAAGCAAGCAATG 2040
Qy 2041 AAAACCCCTGGCCACTTTAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2097
Db 2041 AAAACCCCTGGCCACTTTAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2097
RESULT 5
US-09-371-347-24
; Sequence 24, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE;
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-24
Query Match 99.9%; Score 2095.4; DB 10; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 60
Db 80 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 139
Qy 61 GAAATATGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTAA 120
Db 140 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTAA 199
Qy 121 TCCGATAAGTATGACTAAAAACCGAAACAGCTCCTCTTGTGTTGTGGTTCTACACAG 180
Db 200 TCCGATAAGTATGACTAAAAACCGAAACAGCTCCTCTTGTGTTGTGGTTCTACACAG 259
Qy 181 GGCACCGGAGACCCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Db 260 GGCACCGGAGACCCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 319
Qy 241 CTGCGGTTGATTTCTTGTCTCACCTGCGTATGGGTTACTGGTCTCGGTGATTAGAA 300
Db 320 CTGCGGTTGATTTCTTGTCTCACCTGCGTATGGGTTACTGGTCTCGGTGATTAGAA 379
Qy 301 TACACCTACTTTTGCATTCGGGGGAGATAATTTGATAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTGCATTCGGGGGAGATAATTTGATAACGACTTCAAGAGCTTGGAGCC 439
Qy 361 CGGCATTTCTATGACATCGAGATGATGATGTTAGGTTTAGAACTTGTGGTTGAG 420
Db 440 CGGCATTTCTATGACATCGAGATGATGATGTTAGGTTTAGAACTTGTGGTTGAG 499
Qy 421 CGGTGATTTGCTGGACTCTGGCCGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
Db 500 CGGTGATTTGCTGGACTCTGGCCGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 559
Qy 481 GAGGAGATAAGTGGGCGACTCCCGGTGGCATCACCTGGCATCTTGTAGGAGCAGACCTTGTG 540
Db 560 GAGGAGATAAGTGGGCGACTCCCGGTGGCATCACCTGGCATCTTGTAGGAGCAGACCTTGTG 619
Qy 541 AAGTCAGAGCTGCTACACATTCGAATCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 600

Db 620 AAGTCAGAGCTGCTACACATTCGAATCTCAAGTCGAGCTTCTGAGATTGATGATTCAGGA 679
Qy 601 AGAAGAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
Db 680 AGAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCTCATTACCTACCGTTTGGTACCCCACTCTCACAAGCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCTCATTACCTACCGTTTGGTACCCCACTCTCACAAGCCTCTCTG 799
Qy 721 AATATTCTCTGTTTACCCCAAGAAATTTACAGGTACATCTCAGGAGTCTCTTGGCCAG 780
Db 800 AATATTCTCTGTTTACCCCAAGAAATTTACAGGTACATCTCAGGAGTCTCTTGGCCAG 859
Qy 781 GAGGAAAGCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTCAATTTCAAAG 840
Db 860 GAGGAAAGCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTCAATTTCAAAG 919
Qy 841 GCAGTTCAACTTACTACGAATGATGCGCATAAAAACCACTCTCTGTTGAGAAATGACATT 900
Db 920 GCAGTTCAACTTACTACGAATGATGCGCATAAAAACCACTCTCTGTTGAGAAATGACATT 979
Qy 901 TCAATATACAGACTTTTCTCTATCAGCTGAGATGCTTCAGCGTGATCTGCCCTAACAGT 960
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Qy 1021 GTCTTTTGAATAAAGGAGACACAAAGAGAAAGAGGAGTACCTTACCCAGCATATA 1080
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Qy 1081 CCGTGGGAGTGTCTCTCAGTTCTATTTTACTGCTGTCTTGAATCCGACCAATTCCT 1140
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Db 1220 AAAAAGGACATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGTCTGAAAGGCGAGG 1279
Qy 1201 CTACAGGAGCTGTGAGTAAACAAGGGGAGCGGATTAAGCGCTTTGTACAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAGGGGAGCGGATTAAGCGCTTTGTACAGATGCC 1339
Qy 1261 TGTGCTGTCTGTGATCT 1320
Db 1340 TGTGCTGTCTGTGATCT 1399
Qy 1321 CTGCTCGAATCTCTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAATCTCTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
Qy 1381 TTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
Qy 1441 ACAGAGTTCTCGGAGGAGTATGTACAGGCTGCTGCTCTCTCTCTCTCTCTCTCTCTCT 1500
Db 1520 ACAGAGTTCTCGGAGGAGTATGTACAGGCTGCTGCTCTCTCTCTCTCTCTCTCTCTCT 1579
Qy 1501 CTTTCAGCAACATACATCATCTCCATGAAGACAGCGGAAAGCCCTCTCTCTCTCTCTCT 1560
Db 1580 CTTTCAGCAACATACATCTCCATGAAGACAGCGGAAAGCCCTCTCTCTCTCTCTCTCT 1639
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCCATC 1620
Db 1640 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCCATC 1699
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Db 1700 ATATGTTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGGTTCTTACAAATAGAGAG 1759

Qy 1681 AAATCTCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTTTGGCTGC 1740
Db 1760 AAATCTCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTTTGGCTGC 1819
Qy 1741 AGGCATAAGGATAGGATTTATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db 1820 AGGCATAAGGATAGGATTTATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1879
Qy 1801 ATCTTAACTCATCTAAAGGTTTCTCTTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1860
Db 1880 ATCTTAACTCATCTAAAGGTTTCTCTTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1939
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Qy 1981 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAAAATAAGCAATG 2040
Db 2060 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAAAATAAGCAATG 2119
Qy 2041 AAAACCTTGGCCACTTTAAAGAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2097
Db 2120 AAAACCTTGGCCACTTTAAAGAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2176

RESULT 6

US-10-450-763-874
; Sequence 874, Application US/10450763
; Publication No. US20050196754a1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 874
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIMILAR
; LOCATION: (80)..(2173)
; OTHER INFORMATION: 100% homologous to Homo sapiens methionine synthase
; OTHER INFORMATION: reductase, accession number AF025794, Smith-Waterman Score=3624.
US-10-450-763-874

Query Match 99.9%; Score 2095.4; DB 24; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACACAGGAGGACAGCAAGCCATCGCAGAA 60
Db 80 ATGAGGAGGTTTCTGTTACTATATGCTACACAGGAGGACAGCAAGCCATCGCAGAA 139
Qy 61 GAAATATGTAGCAAGCTGTGTTACATGATTTTCTGCAGATCTTCACTGTTATTAGTAA 120
Db 140 GAAATGTGTAGCAAGCTGTGTTACATGATTTTCTGCAGATCTTCACTGTTATTAGTAA 199
Qy 121 TCCGATATGATGACTTAAACCCGAAACAGCTCTCTTGTGTTGTTGTTCTTACCAGC 180

Db 200 TCCGATAGTATGACTAAAAACGAAACAGCTCCTCTTGTGTGTGTTCTACCAAG 259
Qy 181 GGCACGGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 260 GGCACGGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
Qy 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGTTACTGGTCTCGGTGATTCAGAA 300
Db 320 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGTTACTGGTCTCGGTGATTCAGAA 379
Qy 301 TACACCTACTTTTGAATGGGGGAAGATAAATGTATAACGACTTCAAGAGCTTGGAGCC 360
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Qy 361 CGGCATTTCTATGACACTGGACATGAGATGACTGTGTAGGTTTGAACCTTGTGTTGAG 420
Db 440 CGGCATTTCTATGACACTGGACATGAGATGACTGTGTAGGTTTGAACCTTGTGTTGAG 499
Qy 421 CGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
Db 500 CGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 559
Qy 481 GAGGAGATAAGTGGCGCACTCCGGTGGCATCACCTGCACTCTTGAGGACAGACCTTGTG 619
Db 560 GAGGAGATAAGTGGCGCACTCCGGTGGCATCACCTGCACTCTTGAGGACAGACCTTGTG 619
Qy 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTGGAGCTTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTGGAGCTTCTGAGATTCGATGATTCAGGA 679
Qy 601 AGAAAGGATTCGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATCCCAATGTTGA 660
Db 680 AGAAAGGATTCGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATCCCAATGTTGA 739
Qy 661 ATTGAAGACTTTGAGTCTCTACTTACCCTTCCGTAACCCCACTCTCAACAGCCCTCTG 720
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Db 800 AATATTCCTGGTTTACCCCAAGAAATTTACAGGTACATCTCGAGGAGTCTCTGGCCAG 859
Qy 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGTGGCCAAATTTCAAG 840
Db 860 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGTGGCCAAATTTCAAG 919
Qy 841 GCAGTTCAAATTCTACGAATGATGCCATAAAACCACTCTGCTGCTAGAAATGGACATT 900
Db 920 GCAGTTCAAATTCTACGAATGATGCCATAAAACCACTCTGCTGCTAGAAATGGACATT 979
Qy 901 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTCAGGTGATCTGCCCTAACAGT 960
Db 980 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTCAGGTGATCTGCCCTAACAGT 1039
Qy 961 GATTCCTGAGGTACAAAGCCTACTCCAAAGACTGACGTTGAAGATAAAGAGAGCACTGC 1020
Db 1040 GATTCCTGAGGTACAAAGCCTACTCCAAAGACTGACGTTGAAGATAAAGAGAGCACTGC 1099
Qy 1021 GTCCCTTTTGAATAAAGGCAGACACAAAGAAAGAGGAGTACCTTTACCCAGCATATA 1080
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Qy 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGGACTATACCAGTGACAGTGTCTGAAAAGCGCAG 1200
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Qy 1201 CTACAGGAGCTGTGAGTAAACAAGGGGAGCCGATTTAGCCGCTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAGGGGAGCCGATTTAGCCGCTTTGTACGAGATGCC 1339

Qy 1261 TGTGCTGCTGTTGGATCTCCTCTCGTTCCTCTTCCCTTCCGACGCCACCACTCAGTCTC 1320
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Db 1460 TTTCACCCAGGAAAGCTCCTTTCTTCAACATTTGTGGAATTTCTGTCTAATGCCACA 1519
Qy 1441 ACAGAGGTTCTGCGAAGGGAGTATGATACAGGCTGGCTGGCTTCTGTTGCTTCAGTT 1500
Db 1520 ACAGAGGTTCTGCGAAGGGAGTATGATACAGGCTGGCTGGCTTCTGTTGCTTCAGTT 1579
Qy 1501 CTTTCAGCAAAACATACATGCTCCATGAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1560
Db 1580 CTTTCAGCAAAACATACATGCTCCATGAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTTTCACTTACAGATGACCCCTCAATCCCATC 1620
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Qy 1681 AACTCCCAAGAACACACCCAGATGGAATTTTGAGCAATTTTGAGCAATTTGTTTGGCTGC 1740
Db 1760 AACTCCCAAGAACACACCCAGATGGAATTTTGAGCAATTTGTTTGGCTGC 1819
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Db 1880 ATCTTAACCTCATTAAGGTTTCTCTCAAGAGATGCTCTGTTGGGAGGAGGAGGCC 1939
Qy 1861 CCAGCAAAAGTATGTACAAGACAAACATCCAGCTTATGCGCCAGCAGTGGCGAATTCCTC 1920
Db 1940 CCAGCAAAAGTATGTACAAGACAAACATCCAGCTTATGCGCCAGCAGTGGCGAATTCCTC 1999
Qy 1921 CTCAGGAGAACCGCCATTTATTTATGTTGTGAGATGCAAGAATATGSCCAAGGATGA 1980
Db 2000 CTCAGGAGAACCGCCATTTATTTATGTTGTGAGATGCAAGAATATGSCCAAGGATGA 2059
Qy 1981 CATGATGCCCTTGTGCAATTAATAGCAAGAGGTTGGAGTTGAAAACCTAGAAGCAATG 2040
Db 2060 CATGATGCCCTTGTGCAATTAATAGCAAGAGGTTGGAGTTGAAAACCTAGAAGCAATG 2119
Qy 2041 AAAACCCCTGGCCACTTTAAAGAGAAAAACCTACCTTTCAGGATATTTGGTCAATA 2097
Db 2120 AAAACCCCTGGCCACTTTAAAGAGAAAAACCTACCTTTCAGGATATTTGGTCAATA 2176

RESULT 7

US-11-119-096-24

; Sequence 24, Application US/11119096

; Publication No. US20050191701A1

; GENERAL INFORMATION:

; APPLICANT: Gravel, Roy A,

; APPLICANT: Rozen, Rima

; APPLICANT: Leclerc, Daniel

; APPLICANT: Wilson, Aaron

; APPLICANT: Rosenblatt, David

; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:

; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE

; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME

; FILE REFERENCE: 50004/003005

; CURRENT APPLICATION NUMBER: US/11/119,096

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, CURRENT_FILING_DATE: 2005-04-29
, PRIOR_APPLICATION_NUMBER: 09/487,841
, PRIOR_FILING_DATE: 2000-01-19
, PRIOR_APPLICATION_NUMBER: 09/371,347
, PRIOR_FILING_DATE: 1999-08-10
, PRIOR_APPLICATION_NUMBER: 09/232,028
, PRIOR_FILING_DATE: 1999-01-15
, PRIOR_APPLICATION_NUMBER: 60/071,622
, PRIOR_FILING_DATE: 1998-01-16
, NUMBER_OF_SEQ_ID NOS: 63
, SOFTWARE: FastSeq for Windows Version 4.0
, SEQ ID NO 24
, LENGTH: 3259
, TYPE: DNA
, ORGANISM: Homo sapiens
US-11-119-096-24

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Db	1940	CCAGCAAGATGATGTACAAAGCAACATCCAGCTTCATGCCAGCAGGTGGCGAGAATCCTC	1999
Qy	1921	CTCCAGGAGAAAGCCCATATTTATGTCTGTGGAGATCAAAAGAAATATGGCCAAGGATGTA	1980
Db	2000	CTCCAGGAGAAAGCCCATATTTATGTCTGTGGAGATCAAAAGAAATATGGCCAAGGATGTA	2059
Qy	1981	CATGATGCCCTTGTGCAAATAATAAGCAAAAGAGGTTGGAGTTGAAAAAAGCTAGAACGAATG	2040
Db	2060	CATGATGCCCTTGTGCAAATAATAAGCAAAAGAGGTTGGAGTTGAAAAAAGCTAGAACGAATG	2119
Qy	2041	AAAACCTGGCCACTTTAAAAGAAAGAAAAAGCTACCTCAGGATATTTGGTCTATAA	2097
Db	2120	AAAACCTGGCCACTTTAAAAGAAAGAAAAAGCTACCTCAGGATATTTGGTCTATAA	2176
RESULT 8			
US-09-371-347-43			
; Sequence 43, Application US/09371347			
; Publication No. US2003008276A1			
; GENERAL INFORMATION:			
; APPLICANT: ROY A. Gravel et al.			
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:			
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE			
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER			
; FILE REFERENCE: 50004/003003			
; CURRENT APPLICATION NUMBER: US/09/371,347			
; CURRENT FILING DATE: 1999-08-10			
; PRIOR APPLICATION NUMBER: 60/071,622			
; PRIOR FILING DATE: 1998-01-16			
; PRIOR APPLICATION NUMBER: 09/232,028			
; PRIOR FILING DATE: 1999-01-15			
; NUMBER OF SEQ ID NOS: 51			
; SOFTWARE: FastSeq for Windows Version 4.0			
; SEQ ID NO 43			
; LENGTH: 2097			
; TYPE: DNA			
; ORGANISM: Homo sapiens			
US-09-371-347-43			
Query Match 99.8%; Score 2093.8; DB 10; Length 2097;			
Best Local Similarity 99.9%; Pred. No. 0;			
Matches 2095; Conservative 0; Mismatches 2; Indels 0; Gaps 0;			
Qy	1	ATGAGGAGGTTTCTGTTACTATATGCTTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA	60
Db	1	ATGAGGAGGTTTCTGTTACTATATGCTTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA	60
Qy	61	GAATATGTGAGCAAGCTGTGGTACATCGGATTTTCTCAGATCTTCACTGTATTAGTGAA	120
Db	61	GAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTCAGATCTTCACTATATTAGTGAA	120
Qy	121	TCCGATAAGTATGACCTTAAACACGAAACAGCTCCTCTTGTTGTGTGGTTTCTACCAAG	180
Db	121	TCCGATAAGTATGACCTTAAACACGAAACAGCTCCTCTTGTTGTGTGGTTTCTACCAAG	180
Qy	181	GGCACCGGAGNCCACC CGCACAGCCGCGAAGTTTGTTAAGGAAATACAGAACCAACA	240
Db	181	GGCACCGGAGNCCACC CGCACAGCCGCGAAGTTTGTTAAGGAAATACAGAACCAACA	240
Qy	241	CTGCCGGTTGATTTCTTTTGCTCACTCGCGGTATGGGTTACTTGGGTCTCGGTGATTCAGAA	300
Db	241	CTGCCGGTTGATTTCTTTTGCTCACTCGCGGTATGGGTTACTTGGGTCTCGGTGATTCAGAA	300
Qy	301	TACACCTACTTTTTCGAATGGGGGGAAGATAATTGATAAACGATTCGAAGAGCTTGGAGCC	360
Db	301	TACACCTACTTTTTCGAATGGGGGGAAGATAATTGATAAACGATTCGAAGAGCTTGGAGCC	360
Qy	361	CGGCATTTCTATGACACTGGNACATCGAGATGACTGTGTAGTTTAGAACTTGTTGGTTGAG	420
Db	361	CGGCATTTCTATGACACTGGGACATGCGAGATGACTGTGTAGTTTAGAACTTGTTGGTTGAG	420
Qy	421	CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTATAGTCAAGCAGAGGACAA	480

Db	1501	CTTCAGCCAAACATACATGCAATGCCATGAAGACAGCGGGAAGCCCTGGCTCTCTAAGATA	1560
Qy	1561	TCCATCTCTCTCGAACAACAAATTTCTTTCCACCTTACAGATGACCCCTCAATCCCATC	1620
Db	1561	TCCATCTCTCTCGAACAACAAATTTCTTTCCACCTTACAGATGACCCCTCAATCCCATC	1620
Qy	1621	ATAATGGTGGTCCAGGAAACCGGATAGCCCCGGTTTATTTGGTTTCTTACAAATAGAG	1680
Db	1621	ATAATGGTGGTCCAGGAAACCGGATAGCCCCGGTTTATTTGGTTTCTTACAAATAGAG	1680
Qy	1681	AAACTCCAAGAACCAACCCAGATGGAATTTTCGGAGCAATGGTTGTTTGGCTGC	1740
Db	1681	AAACTCCAAGAACCAACCCAGATGGAATTTTCGGAGCAATGGTTGTTTGGCTGC	1740
Qy	1741	AGGATAAGGATAGGGATTTATCTATTTCAGAAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1800
Db	1741	AGGATAAGGATAGGGATTTATCTATTTCAGAAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1800
Qy	1801	ATCTTAATCTAATCTAAAGGTTTCTCTCTAAGAGATGCTCTGTGGGAGGAGGAAGCC	1860
Db	1801	ATCTTAATCTAATCTAAAGGTTTCTCTCTAAGAGATGCTCTGTGGGAGGAGGAAGCC	1860
Qy	1861	CCAGCAAGATGTATACAGCAACATCCAGCTTCATCGCAGCAGGTGGCGAGATCCTC	1920
Db	1861	CCAGCAAGATGTATACAGCAACATCCAGCTTCATCGCAGCAGGTGGCGAGATCCTC	1920
Qy	1921	CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGATATGGCCAGGATGTA	1980
Db	1921	CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGATATGGCCAGGATGTA	1980
Qy	1981	CATGATGCCCTTGTGCAAAATTAAGCAAGAGAGGTTGGAGTTGAAAACCTAGAACCAATG	2040
Db	1981	CATGATGCCCTTGTGCAAAATTAAGCAAGAGAGGTTGGAGTTGAAAACCTAGAACCAATG	2040
Qy	2041	AAARCCCTGGCCACTTTAAAGAGAAAACGCTTACCTCAGGATATTTGGTCATAA	2097
Db	2041	AAARCCCTGGCCACTTTAAAGAGAAAACGCTTACCTCAGGATATTTGGTCATAA	2097
RESULT 9			
US-11-119-096-43			
; Sequence 43, Application US/111119096			
; Publication No. US20050191701A1			
; GENERAL INFORMATION:			
; APPLICANT: Gravel, Roy A,			
; APPLICANT: Rozen, Rima			
; APPLICANT: Leclerc, Daniel			
; APPLICANT: Wilson, Aaron			
; APPLICANT: Rosenblatt, David			
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:			
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE			
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME			
; FILE REFERENCE: 50004/003005			
; CURRENT APPLICATION NUMBER: US/11/119,096			
; PRIOR FILING DATE: 2005-04-29			
; PRIOR APPLICATION NUMBER: 09/487,841			
; PRIOR FILING DATE: 2000-01-19			
; PRIOR APPLICATION NUMBER: 09/371,347			
; PRIOR FILING DATE: 1999-08-10			
; PRIOR APPLICATION NUMBER: 09/232,028			
; PRIOR FILING DATE: 1999-01-15			
; PRIOR APPLICATION NUMBER: 60/071,622			
; PRIOR FILING DATE: 1998-01-16			
; NUMBER OF SEQ ID NOS: 63			
; SOFTWARE: FastSeq for Windows Version 4.0			
; SEQ ID NO 43			
; LENGTH: 2097			
; TYPE: DNA			
; ORGANISM: Homo sapiens			
US-11-119-096-43			
Query Match 99.8%; Score 2093.8; DB 26; Length 2097;			
Best Local Similarity 99.9%; Pred. No. 0;			

1081 CCTGGGAGTGTCTCTCCAGTTCAATTTTACTGTGTCTTGAAATCCGAGCAATTCCT 1140
1081 CCTGGGGAGTGTCTCTCCAGTTCAATTTTACTGTGTCTTGAAATCCGAGCAATTCCT 1140
1141 AAAAAGGCATTTTGGAGCCCTTGTGGACTATACCAAGTGCAGTGTCTGAAAAGCGCAGG 1200
1141 AAAAAGGCATTTTGGAGCCCTTGTGGACTATACCAAGTGCAGTGTCTGAAAAGCGCAGG 1200
1201 CTACAGGAGCTGTGCAGTAAACAAGGGGACCGGATATAGCGCTTTGTAGCAGATGCC 1260
1201 CTACAGGAGCTGTGCAGTAAACAAGGGGACCGGATATAGCGCTTTGTAGCAGATGCC 1260
1261 TGTGCTGTCTGTGGATCT 1320
1261 TGTGCTGTCTGTGGATCT 1320
1321 CTGCTCGAATCT 1380
1321 CTGCTCGAATCT 1380
1381 TTTTACCCAGGAAAGCTCCATTTTGTCTTCAATTTGTGGAATTTCTGTCTACTGCGCA 1440
1381 TTTTACCCAGGAAAGCTCCATTTTGTCTTCAATTTGTGGAATTTCTGTCTACTGCGCA 1440
1441 ACAGAGGTTCTGGGAAAGGAGTATGTACAGGCTGGCTTGTGTGTTGTTGTTGTTGTTG 1500
1441 ACAGAGGTTCTGGGAAAGGAGTATGTACAGGCTGGCTTGTGTGTTGTTGTTGTTGTTG 1500
1501 CTTTACCCAAACATACATGCATCCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
1501 CTTTACCCAAACATACATGCATCCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
1561 TCCATCTCTCTCGAACAACAATTTCTTCCATTTACAGATGACCCCTCAATFCCCCTATC 1620
1561 TCCATCTCTCTCGAACAACAATTTCTTCCATTTACAGATGACCCCTCAATFCCCCTATC 1620
1621 ATAATGGTGGTCCAGAACCGGCATAGCCCGTTTATTTGGGTCTCTACAAATAGAGAG 1680
1621 ATAATGGTGGTCCAGAACCGGCATAGCCCGTTTATTTGGGTCTCTACAAATAGAGAG 1680
1681 AAACCTCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGTGCTGC 1740
1681 AAACCTCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGTGCTGC 1740
1741 AGGCATAAGGATAGGATTTATCTATTTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
1741 AGGCATAAGGATAGGATTTATCTATTTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
1801 ATCTTAACTCATCTAAAGTTTCTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGCC 1860
1801 ATCTTAACTCATCTAAAGTTTCTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGCC 1860
1861 CCAGCAAAGTATGTACAGAACATCCAGCTTTCATGGCCAGCAGCTGGCGAGAAATCCTC 1920
1861 CCAGCAAAGTATGTACAGAACATCCAGCTTTCATGGCCAGCAGCTGGCGAGAAATCCTC 1920
1921 CTCAGGAGAACCGCCATATTTATGTGTGTGGAGATGCAAAAGAAATATGGCCAAAGATGA 1980
1921 CTCAGGAGAACCGCCATATTTATGTGTGTGGAGATGCAAAAGAAATATGGCCAAAGATGA 1980
1981 CATGATGCCCTTGTGCAATATTAAGCAAGAGTTGGAGTTGAAAACCTAGAACCAATG 2040
1981 CATGATGCCCTTGTGCAATATTAAGCAAGAGTTGGAGTTGAAAACCTAGAACCAATG 2040
2041 AAAACCTGGCCACTTTAAAAGAAAGAAACGCTACTCTTCAGGATATTTGGTTCATAA 2097
2041 AAAACCTGGCCACTTTAAAAGAAAGAAACGCTACTCTTCAGGATATTTGGTTCATAA 2097

RESULT 10
US-10-741-600-692
; Sequence 692, Application US/10741600

; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSeq For Windows Version 4.0
; SEQ ID NO 692
; LENGTH: 3256
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-692

Query Match 99.6%; Score 2088.6; DB 22; Length 3256;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 2076; Conservative 21; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGAGAGTTTCTGTACTATATCTACACAGCAGGAGCAGCAAGGCCATCCGAGAA 60
DB 94 ATGAGAGAGTTTCTGTACTATATCTACACAGCAGGAGCAGCAAGGCCATCCGAGAA 153
QY 61 GAAATATGTGACAAAGCTGTGTATCATGGAATTTCTGCAGATCTTCACTGTATTAGTGA 120
DB 154 GAAATRTGTGACCAAGCTGTGTATCATGGAATTTCTGCAGATCTTCACTGTATTAGTGA 213
QY 121 TCCGATAAGTATGACTTAAACCCGAAACAGCTCTCTTGTGTGTGTGTGTGTGTGTGTGT 180
DB 214 TCCGATAAGTATGACTTAAACCCGAAACAGCTCTCTTGTGTGTGTGTGTGTGTGTGTGT 273
QY 181 GGCACGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
DB 274 GGCACGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 333
QY 241 CTGCGGTGTGATTTCTTGTCTCACCTGGGTATGGTTACTGGGTCTCGGTGATTCAGAA 300
DB 334 CTGCGGTGTGATTTCTTGTCTCACCTGGGTATGGTTACTGGGTCTCGGTGATTCAGAA 393
QY 301 TACACCTACTTTTGAATGGGGGAGATAAATGTATAACCGACTTCAAGAGCTTGGAGCC 360
DB 394 TACACCTACTTTTGAATGGGGGAGATAAATGTATAAAGACTTCAAGAGCTTGGAGCC 453
QY 361 CGGCATTTCTATGACACTGGACATGCAGATGATGTAGTTTGTAGAACTTGTGTGTGAG 420
DB 454 CGGCATTTCTATGACACTGGACATGCAGATGATGTAGTTTGTAGAACTTGTGTGTGAG 513
QY 421 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGAGAGACAA 480
DB 514 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGAGAGACAA 573
QY 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGTCATCTTGTAGGACAGACCTTGTG 540
DB 574 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGTCATCTTGTAGGACAGACCTTGTG 633
QY 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
DB 634 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 693
QY 601 AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGA 660
DB 694 AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGA 753
QY 661 ATTGAAGACTTTTGAAGTCTCACTTACCCTTCCGTTCCGTTCCGTTCCGTTCCGTTCCGTT 720
DB 754 ATTGAAGACTTTTGAAGTCTCACTTACCCTTCCGTTCCGTTCCGTTCCGTTCCGTTCCGTT 813
QY 721 AATATTTCTGGTTTACCCCGCAGAAATTTTACAGGTATCATCTGCAGAGTCTCTTGGCCAG 780
DB 814 AATATTTCTGGTTTACCCCGCAGAAATTTTACAGGTATCATCTGCAGAGTCTCTTGGCCAG 873
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTCTGACGATCCAGTGTCTTCAAGTGCCAAATTTCAAAG 840

QY 541 AAGTCAGAGCTGCTACACATTGGAATCTCAAGTCGAGCTTCTGAGATTTCGATGATTCAGGA 600
DB 652 AAGTCAGAGCTGCTACACATTGGAATCTCAAGTCGAGCTTCTGAGATTTCGATGATTCAGGA 711
QY 601 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
DB 712 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 771
QY 661 ATTGAAGACTTTGAGTCTCTACATTACCGTTGGTACCCGCACTCTCAAGGCTCTCTG 720
DB 772 ATTGAAGACTTTGAGTCTCTACATTACCGTTGGTACCCGCACTCTCAAGGCTCTCTG 831
QY 721 AATATTCTGTTTACCCGCAAGATATTTACAGGTACATCTCGAGGATCTCTTGCCAG 780
DB 832 AATATTCTGTTTACCCGCAAGATATTTACAGGTACATCTCGAGGATCTCTTGCCAG 891
QY 781 GAGGAAGCCAAATGATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 840
DB 892 GAGGAAGCCAAATGATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 951
QY 841 GCAGTTCAACTACTACGAATGATGCCATAAAACCACTCTGCTGTTAGAAATTTGGACATT 900
DB 952 GCAGTTCAACTACTACGAATGATGCCATAAAACCACTCTGCTGTTAGAAATTTGGACATT 1011
QY 901 TCAATACAGACTTTTCTCTATCAGCTCGGAGATGCCCTTCAGCGTGTCTGCCCTACACT 960
DB 1012 TCAATACAGACTTTTCTCTATCAGCTCGGAGATGCCCTTCAGCGTGTCTGCCCTACACT 1071
QY 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAGAGAGCACTGC 1020
DB 1072 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCAGSTTGAAGATAAAGAGAGCACTGC 1131
QY 1021 GTCTTTTGAATAAAGGCAGACACAAAGAGAAAGGAGCTACCTTACCCGACATATA 1080
DB 1132 GTCTTTTGAATAAAGGCAGACACAAAGAGAAAGGAGCTACCTTACCCGACATATA 1191
QY 1081 CTTGCGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTCTTGAATTCGAGCAATTCCT 1140
DB 1192 CTTGCGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTCTTGAATTCGAGCAATTCCT 1251
QY 1141 AAAAGGCCATTTTTCGAGCCCTTGTGGACTATACAGTGACAGTGTCTGAAAAGCGCAG 1200
DB 1252 AAAAGGCCATTTTTCGAGCCCTTGTGGACTATACAGTGACAGTGTCTGAAAAGCGCAG 1311
QY 1201 CTACAGAGCTGTGAGTAAACAAAGGGGACGCGATATAGCCGCTTTGTACGAGATGCC 1260
DB 1312 CTACAGAGCTGTGAGTAAACAAAGGGGACGCGATATAGCYGCTTTGTACGAGATGCC 1371
QY 1261 TGTGCTGCTGTTGAGTCTCTCTCCCTGCTTTCCCTTTCTTGCCAGCCACACTCAGTCTC 1320
DB 1372 TGTGCTGCTGTTGAGTCTCTCTCCCTGCTTTCCCTTTCTTGCCAGCCACACTCAGTCTC 1431
QY 1321 CTGCTCGAACATCTCTCTAACTTCAACCCAGACCATATTCGTTGTCAGCTCAAGTTTA 1380
DB 1432 CTGCTCGAACATCTCTCTAACTTCAACCCAGACCATATTCGTTGTCAGCTCAAGTTTA 1491
QY 1381 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
DB 1492 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1551
QY 1441 ACAGAGTTCTGCGAAGGAGTATGTACAGGCTGGCTGGCTTTGTTGTTCTCAGTT 1500
DB 1552 ACAGAGTTCTGCGAAGGAGTATGTACAGGCTGGCTGGCTTTGTTGTTCTCAGTT 1611
QY 1501 CTTTCAGCCAAACATACATGATCCCATGAAAGAGAGGAAAGCCCTGGCTCCCTAAGATA 1560
DB 1612 CTTTCAGCCAAACATACATGATCCCATGAAAGAGAGGAAAGCCCTGGCTCCCTAAGATA 1671
QY 1561 TCCATCTCTCTCGAAACAAATTTCTTCCATTACAGATGACCCCTCAATCCCCATC 1620
DB 1672 TCCATCTCTCTCGAAACAAATTTCTTCCATTACAGATGACCCCTCAATCCCCATC 1731

QY 1621 ATAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTGGTTCCTTACAAATAGAG 1680
DB 1732 ATAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTGGTTCCTTACAAATAGAG 1791
QY 1681 AAATCCCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
DB 1792 AAATCCCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1851
QY 1741 AGGCATAAGGATAGGATTTCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
DB 1852 AGGCATAAGGATAGGATTTCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1911
QY 1801 ATCTTAACTCATCTAAAGTTTCTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
DB 1912 ATCTTAACTCATCTAAAGTTTCTCTCAAGAGATGCTCTGTTGGGAGGAGGAGCC 1971
QY 1861 CCAGCAAAAGTATGTAACAAGCAATCCAGCTTTCAGCCAGCAGCGTGGCGAATCTCTC 1920
DB 1972 CCAGCAAAAGTATGTRCAAGCAACATCCAGCTTTCATGGCCAGCAGGTGGCRAGATCTCTC 2031
QY 1921 CTCCAGGAGAACCGGCATATTTATGTGTGAGATGCAAAAGATATGCCCAGGATGTA 1980
DB 2032 CTCCAGGAGAACCGGCATATTTATGTGTGAGATGCAAAAGATATGCCCAGGATGTA 2091
QY 1981 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGAAAACCTAGAACAAATG 2040
DB 2092 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGAAAACCTAGAACAAATG 2151
QY 2041 AAAACCCCTGGCCACTTTTAAAGAGAAACCAACCTACCTTCAGGATATTTGGTCATAA 2097
DB 2152 AAAACCCCTGGCCACTTTTAAAGAGAAACCAACCTACCTTCAGGATATTTGGTCATAA 2208

RESULT 12

US-09-371-347-45
; Sequence 45, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-45

Query Match 99.2%; Score 2079.4; DB 10; Length 2094;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;

QY 1 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACAGCAAGGCCATCGCAGAA 60
DB 1 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACAGCAAGGCCATCGCAGAA 60
QY 61 GAAATATGTGAGCAAGCTGTGGTACATGGATTTCTGACAGATCTTCACTGTATTAGTAA 120
DB 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTCTGACAGATCTTCACTGTATTAGTAA 120
QY 121 TCCGATAAGTATGACCTTAAAAACCGGAAACAGCTCTCTTGTGTTGTTTCTACACG 180
DB 121 TCCGATAAGTATGACCTTAAAAACCGGAAACAGCTCTCTTGTGTTGTTTCTACACG 180

Qy	181	GGCA	CCGGAGACCCAC	CCCGACACAGCCCGCAAGTTTCTTAAAGAAATACAGAAACCAAAACA	240
Db	181	GGCA	CCGGAGACCCAC	CCCGACACAGCCCGCAAGTTTCTTAAAGAAATACAGAAACCAAAACA	240
Qy	241	CTGCCGGTTCGATTTCTTTTGGTTCACCTCGCGGTATGGGTTTACTGGGTCTCGGTGATTACAGAA	300		
Db	241	CTGCCGGTTCGATTTCTTTTGGTTCACCTCGCGGTATGGGTTTACTGGGTCTCGGTGATTACAGAA	300		
Qy	301	TACACCTACTTTTGGCAATGGGGGGAAGATAAATTGATAAACGACTTCAAGAGCTTGGAGCC	360		
Db	301	TACACCTACTTTTGGCAATGGGGGGAAGATAAATTGATAAACGACTTCAAGAGCTTGGAGCC	360		
Qy	361	CGGCATTTCTATGACACATGGACATGACAGATGACTGTGTAGGTTTGAACCTTGTGGTTGAG	420		
Db	361	CGGCATTTCTATGACACATGGACATGACAGATGACTGTGTAGGTTTGAACCTTGTGGTTGAG	420		
Qy	421	CCGTGGATTCGTGACCTCTGGCAGCCCTCAGAAAGCATTTTAAAGTCAACGACAGACAA	480		
Db	421	CCGTGGATTCGTGACCTCTGGCAGCCCTCAGAAAGCATTTTAAAGTCAACGACAGACAA	480		
Qy	481	GAGGAGATAAGTGGCGCACTCCCGTGGCATCACCTGCATCCTTTGAGGACAGACCTTGTG	540		
Db	481	GAGGAGATAAGTGGCGCACTCCCGTGGCATCACCTGCATCCTTTGAGGACAGACCTTGTG	540		
Qy	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTACAGGA	600		
Db	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTACAGGA	600		
Qy	601	AGAAAGCATTTCTGAGGTTTTGAGCAAAATGCGAGTGAACCAACCAATCCCATGTTGTA	660		
Db	601	AGAAAGCATTTCTGAGGTTTTGAGCAAAATGCGAGTGAACCAACCAATCCCATGTTGTA	660		
Qy	661	ATTGAAAGACTTTGAGTCTCACTTTACCCGTTTCGGTACCCCACTCTCACAAAGCCTCTCTG	720		
Db	661	ATTGAAAGACTTTGAGTCTCACTTTACCCGTTTCGGTACCCCACTCTCACAAAGCCTCTCTG	720		
Qy	721	AATATTCCTGGTTTACCCCGAGAAATATTTACAGGTACATCTGACGAGAGTCTCTTGCCAG	780		
Db	721	AATATTCCTGGTTTACCCCGAGAAATATTTACAGGTACATCTGACGAGAGTCTCTTGCCAG	780		
Qy	781	GAGGAAAGCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG	840		
Db	781	GAGGAAAGCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG	840		
Qy	841	GCAGTTCCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATT	900		
Db	841	GCAGTTCCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATT	900		
Qy	901	TCAAAATACAGACTTTTTCCTATCAGCCTGGAGATGCCCTTCAGCGTGATCTGCCCTAACAGT	960		
Db	901	TCAAAATACAGACTTTTTCCTATCAGCCTGGAGATGCCCTTCAGCGTGATCTGCCCTAACAGT	960		
Qy	961	GATTTCTGAGGTACAAAGCCTTACTCCAAGACTGCGCTTGAAGTAAAGAGAGCACTGC	1020		
Db	961	GATTTCTGAGGTACAAAGCCTTACTCCAAGACTGCGCTTGAAGTAAAGAGAGCACTGC	1020		
Qy	1021	GTCCCTTTTGAATAAAGGCGAGACACAAAGAAAGAGGAGTACCTTTACCCAGCATATA	1080		
Db	1021	GTCCCTTTTGAATAAAGGCGAGACACAAAGAAAGAGGAGTACCTTTACCCAGCATATA	1080		
Qy	1081	CCTGCGGGATGTTCTCTCCAGTTTCATTTTACCTGGTGTCTTGAAATCCGAGCAATTCCT	1140		
Db	1081	CCTGCGGGATGTTCTCTCCAGTTTCATTTTACCTGGTGTCTTGAAATCCGAGCAATTCCT	1140		
Qy	1141	AAAAGGCATTTTTCGAGCCCTTGTGGACTATACCAAGTACAGTGTCTGAAAAGCGGAGG	1200		
Db	1141	AAAAGGCATTTTTCGAGCCCTTGTGGACTATACCAAGTACAGTGTCTGAAAAGCGGAGG	1200		
Qy	1201	CTACAGGAGCTGTGACGTAAACAGGGGCGAGCCGATTTATAGCCGCTTTGTACAGATGCC	1260		
Db	1201	CTACAGGAGCTGTGACGTAAACAGGGGCGAGCCGATTTATAGCCGCTTTGTACAGATGCC	1260		
Qy	1261	TGTGCTCTGCTTGTGGATCTCCTCCTCGCTTTTCCTTTCTTGGCCAGGCACCACTTCAGTCTC	1320		

[illegible]

RESULT 13

RESULTS
US-11-119-096-45

03-11-119-098-43
: Sequence 45. Application US/11119096

; sequence 43, Application US/111
; Publication No. US20050191701A1

; GENERAL INFORMATION:

APPLICANT: Gravel, Roy A,

; APPLICANT: Rozen, Rima

APPLICANT: Leclerc, Daniel

APPLICANT: Wilson, Aaron

APPLICANT: Rosenblatt, David

; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:

; TITLE OF INVENTION: CLONING

; TITLE OF INVENTION: DEFECTS

FILE REFERENCE: 50004/003005

; CURRENT APPLICATION NUMBER: US/1

; CURRENT FILING DATE: 2005-04-29

```
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-45

Query Match      99.2%; Score 2079.4; DB 26; Length 2094;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;

QY 1 ATGAGGAGGTTCTGTACTATATGCTACACAGCGGACGCGCAAGGCCATCGCAGAA 60
DB 1 ATGAGGAGGTTCTGTACTATATGCTACACAGCGGACGCGCAAGGCCATCGCAGAA 60
QY 61 GAAATATGTGAGCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGAA 120
DB 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGAA 120
QY 121 TCCGATAAGTATGACCTTAATAACCGAAACAGCTCCTCTGTGTGTGTGTGTCTACACG 180
DB 121 TCCGATAAGTATGACCTTAATAACCGAAACAGCTCCTCTGTGTGTGTGTGTCTACACG 180
QY 181 GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
DB 181 GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
QY 241 CTGCCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTACTTGGGTCTCGGTGATTCAGAA 300
DB 241 CTGCCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTACTTGGGTCTCGGTGATTCAGAA 300
QY 301 TACACCTACTTTTGGCAATGGGGGAAAGATAATATGATAAACAGCTTCAAGAGCTTGGAGCC 360
DB 301 TACACCTACTTTTGGCAATGGGGGAAAGATAATATGATAAACAGCTTCAAGAGCTTGGAGCC 360
QY 361 CGGCATTTCTATGACACTGACATGACATGACATGACATGACATGACATGACATGACATGAC 420
DB 361 CGGCATTTCTATGACACTGACATGACATGACATGACATGACATGACATGACATGACATGAC 420
QY 421 CCGTGGATTTGCTGGAATCTGGCCAGCGCCCTCAGAAAGCAATTTAGGTCAAGCAGAGGACAA 480
DB 421 CCGTGGATTTGCTGGAATCTGGCCAGCGCCCTCAGAAAGCAATTTAGGTCAAGCAGAGGACAA 480
QY 481 GAGGAGATTAAGTGGCGCACTCCCGGTGGGATCACTGGCATCCCTTGAGGACAGACCTTTGTG 540
DB 481 GAGGAGATTAAGTGGCGCACTCCCGGTGGGATCACTGGCATCCCTTGAGGACAGACCTTTGTG 540
QY 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
DB 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
QY 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAAATGCAAGTGAAACAGCAACCAATCCAATGTTGTA 660
DB 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAAATGCAAGTGAAACAGCAACCAATCCAATGTTGTA 660
QY 661 ATTGAAGACTTTGAGTCTCTCACTTACCGGTTGGGTACCCCACTCTCAAGCCTCTCTG 720
DB 661 ATTGAAGACTTTGAGTCTCTCACTTACCGGTTGGGTACCCCACTCTCTCAAGCCTCTCTG 720
QY 721 AATATTTCTGTGTTTACCCAGAAATATTTACAGGTACATCTGACAGAGTCTCTTGGCCAG 780
DB 721 AATATTTCTGTGTTTACCCAGAAATATTTACAGGTACATCTGACAGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCCAGTATCTGTGATCTTACAGCAGATCCAGTCTTTTCAAGTGGCAATTTTCAAAG 840
DB 781 GAGGAAAGCCAGTATCTGTGATCTTACAGCAGATCCAGTCTTTTCAAGTGGCAATTTTCAAAG 840
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DB 781 GAGGAAAGCCAGTATCTGTGACTTTACGAGATCCAGTCTTTTCAAGTGGCAATTTCAAAG 840
QY 841 GCAGTTCACTTTACTACGAATGATGCCATAAAAAACACTCTGCTGGTAGAATTTGACATTT 900
DB 841 GCAGTTCACTTTACTACGAATGATGCCATAAAAAACACTCTGCTGGTAGAATTTGACATTT 900
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DB 901 TCAAAATACAGACTTTTCTCTATCAGGCTCGAGATGCTTTCAGGGTGTATCTGCCCTTAACAGT 960
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DB 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGTCAGTCTTGAAGATAAAAGAGAGCAGTGC 1020
QY 1021 GTTCCTTTTGAATAAAGCGACACAAAGAAAGAAAGAGCTACCTTACCCAGCATATA 1080
DB 1021 GTTCCTTTTGAATAAAGCGACACAAAGAAAGAAAGAGCTACCTTACCCAGCATATA 1080
QY 1081 CTTGCGGGATGTTCTCTCAGTTCATTTTACCTGCTGTTGAAATCCGAGCAATTCCT 1140
DB 1081 CTTGCGGGATGTTCTCTCAGTTCATTTTACCTGCTGTTGAAATCCGAGCAATTCCT 1140
QY 1141 AAAAAAGGCATTTTTCGAGCCCTTGTGACTATACAGTGTACAGTGTGAAAAGCGCAG 1200
DB 1141 AAAAAAGGCATTTTTCGAGCCCTTGTGACTATACAGTGTACAGTGTGAAAAGCGCAG 1200
QY 1201 CTACAGGAGCTGTGAGTAAACAAGGGGAGCGGATATATAGCGCTTTGTACGAGATGCC 1260
DB 1201 CTACAGGAGCTGTGAGTAAACAAGGGGAGCGGATATATAGCGCTTTGTACGAGATGCC 1260
QY 1261 TGTGCTGCTGTTGCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1320
DB 1261 TGTGCTGCTGTTGCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1320
QY 1321 CTGCTCGAAATCTTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
DB 1321 CTGCTCGAAATCTTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
QY 1381 TTTTACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
DB 1381 TTTTACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGGTTCTCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTGTGCTTCAGTT 1500
DB 1441 ACAGAGGTTCTCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTGTGCTTCAGTT 1500
QY 1501 CTTTACGCCAAACATACATGTCATCCATCCATGAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1560
DB 1501 CTTTACGCCAAACATACATGTCATCCATCCATGAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1560
QY 1561 TCCATCTCTCTCGAACAATAATTTCTTCCATTTACCCAGATGACCCCTCAATCCCCATC 1620
DB 1561 TCCATCTCTCTCGAACAATAATTTCTTCCATTTACCCAGATGACCCCTCAATCCCCATC 1620
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DB 1621 ATAAATGGTGGGTCCAGGAACCGGATAGCCCGCTTATTTGGGTTCCTACAAATAGAGAG 1680
QY 1681 AAACTCCAGAAACAAACCCAGATGAAAATTTTGGAGCAATGTGTTTGTGGCTGC 1740
DB 1681 AAACTCCAGAAACAAACCCAGATGAAAATTTTGGAGCAATGTGTTTGTGGCTGC 1740
QY 1741 AGGCATTAAGGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTCTTAAGCATGGG 1800
DB 1741 AGGCATTAAGGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTCTTAAGCATGGG 1800
QY 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCCTGTTGGGGAGGAGGAAGCC 1860
DB 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCCTGTTGGGGAGGAGGAAGCC 1860
QY 1861 CCAGCAAAAGTATGTACAAGCAAAATCCAGTCTTATGCGCAGCAGAGTGGCGGAATCTCTC 1920
DB 1861 CCAGCAAAAGTATGTACAAGCAAAATCCAGTCTTATGCGCAGCAGAGTGGCGGAATCTCTC 1920
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QY 1921 CTCAGGAGAACGGCCCATATTTATGTGTGGAGATGCAAGAAATATGCCCAAGGATGTA 1980
DB 1918 CTCAGGAGAACGGCCCATATTTATGTGTGGAGATGCAAGAAATATGCCCAAGGATGTA 1977
QY 1981 CATGATGCCCTTGTGCAAAATAATAACCAAGAGGTTGGAGTTGAAAACTTAGAACCAATG 2040
DB 1978 CATGATGCCCTTGTGCAAAATAATAACCAAGAGGTTGGAGTTGAAAACTTAGAACCAATG 2037
QY 2041 AAAACCTGGCCACTTTAAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2097
DB 2038 AAAACCTGGCCACTTTAAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2094

RESULT 14
US-09-371-347-47
; Sequence 47, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-47

Query Match 99.1%; Score 2077.4; DB 10; Length 2093;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;

QY 1 ATGAGGAGGTTCTGTACTATATGCTACACAGCAGGAGCAGGCAAGGCCATCGCAGAA 60
DB 1 ATGAGGAGGTTCTGTACTATATGCTACACAGCAGGAGCAGGCAAGGCCATCGCAGAA 60
QY 61 GAAATGTGAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTCACTGTATTAGTGAA 120
DB 61 GAAATGTGAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTCACTGTATTAGTGAA 120
QY 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTGTGTGTGGTTTCTACACAG 180
DB 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTGTGTGTGGTTTCTACACAG 180
QY 181 GGCACCGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
DB 181 GGCACCGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
QY 241 CTGCGGTTGATTTCTTCTACCTCGCGTATGGGTACTGGGTCTCGGTGATTCAGAA 300
DB 241 CTGCGGTTGATTTCTTCTACCTCGCGTATGGGTACTGGGTCTCGGTGATTCAGAA 300
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DB 301 TACACCTACTTTTGCATGGGGGAAGATAAATGATAAACGACTTCAAGAGCTTGGAGCC 360
QY 361 CGGCATTTCTAGACACTGACATGACATGACATGACATGACATGACATGACATGACATG 420
DB 361 CGGCATTTCTAGACACTGACATGACATGACATGACATGACATGACATGACATGACATG 420
QY 421 CCGTGATGCTGACTGCGCCAGCCCTCAGAAAGCATTTTAGGTCAGCAGAGCAAA 480
DB 421 CCGTGATGCTGACTGCGCCAGCCCTCAGAAAGCATTTTAGGTCAGCAGAGCAAA 480

QY 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATACCTTGCATCTCTTGAGGACAGACCTTGTG 540
DB 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATACCTTGCATCTCTTGAGGACAGACCTTGTG 540
QY 541 AAGTCAGAGCTGCTACACATTTCAAGTCTCAAGTCTCAAGTCTCAAGTCTCAAGTCT 600
DB 541 AAGTCAGAGCTGCTACACATTTCAAGTCTCAAGTCTCAAGTCTCAAGTCTCAAGTCT 600
QY 601 AGAAGAGGATTTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAATGTTGA 660
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QY 661 ATTGAAGACTTTGAGTCTCACTTACCCTTGGTACCCCACTCTCAAGGCTCTCTG 720
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QY 781 GAGGAAAGCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 840
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DB 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTCTGTGTAGAAATTTGACATT 900
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DB 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTTGAAGATAAAGAGAGCACTGC 1020
QY 1021 GTCTTTTGAATAAAGGAGACACAAAGAGAGAGGAGCTTACCTTACCCAGCATATA 1080
DB 1021 GTCTTTTGAATAAAGGAGACACAAAGAGAGAGGAGCTTACCTTACCCAGCATATA 1080
QY 1081 CTTGCGGAGTGTCTCTCAGTTTCTTCTGAGTTTCTTCTGAGTTTCTTCTGAGTTTCT 1140
DB 1081 CTTGCGGAGTGTCTCTCAGTTTCTTCTGAGTTTCTTCTGAGTTTCTTCTGAGTTTCT 1140
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DB 1141 AAAAAGGCAATTTTTCGAGCCTTGTGAGCTATACAGTGAAGTCTGAAAAGCCGAGG 1200
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DB 1201 CTACAGGAGCTGTGAGTAAACAAAGGCGAGCGATTTAGCCGCTTTGTAGAGATGCC 1260
QY 1261 TGTGCTGCTTGTGATCT 1320
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QY 1501 CTTTCAAGGAGGAGGAGTATGATACAGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCT 1560
DB 1501 CTTTCAAGGAGGAGGAGTATGATACAGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCT 1560

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1861 CCAGCAAGATGTGTAACAGACACATCCAGCTTCATGGCCAGCAGCTGGGAGATCCCTC 1920
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1921 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGATATGGCCAAAGGATGTA 1980
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1981 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGAAAAACTAGAACAAATG 2040
1977 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGAAAAACTAGAACAAATG 2036
2041 AAAACCTGGCCACTTTAAAGAAAGAAAAACGCTACTCTCAGGATATTTGGTCATAA 2097
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RESULT 15
US-11-119-096-47
; Sequence 47, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A.
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119, 096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-47

Query Match 99.1%; Score 2077.4; DB 26; Length 2093;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;

QY 1 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 60
DB 1 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 60
QY 61 GAAATATGTGAGCAAGCTGTGGTACATGATTTTCTGCAGATCTTTCACTGTATTAGTGAA 120
DB 61 GAAATGTGTGAGCAAGCTGTGGTACATGATTTTCTGCAGATCTTTCACTGTATTAGTGAA 120
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DB 121 TCCGATATAGTATGACTTAAAAACCGAAGCAGCTCTCTGTGTGTGGTGTCTTACCAG 180
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DB 181 GGCACCGGAGACCCACCGGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
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QY 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420
DB 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420
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DB 421 CGGTGGATTTGCTGGACCTCTGAGAAAGCACTTTTAGGTCAAGCAGAGACAA 480
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DB 481 GAGGAGATAAGTGGGCGACTCCGGTGGCATCCCTGCATCCTTGAGGACAGACCTTGTG 540
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DB 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGA 660
QY 661 ATTGAAGCTTTGAGTCTCACTTACCGGTTCCGTTACCCCGCTCTCACAAGCCTCTCTG 720
DB 661 ATTGAAGCTTTGAGTCTCACTTACCGGTTCCGTTACCCCGCTCTCACAAGCCTCTCTG 720
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DB 721 AATATTCTGGTTTACCCCGCAATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
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DB 841 GCAGTTCAACTTACTACGATGATGCAATGCAATGCAATGCAATGCAATGCAATGCAAT 900
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QY 1081 CCTGCGGGATGTTCTCTCCAGTTTCACTTTTACTCTGGTGTCTTGAATCCGAGCAATTCCT 1140

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 15:42:02 ; Search time 235.757 Seconds
(without alignments)
14554.251 Million cell updates/sec

Title: US-09-371-347A-43

Perfect score: 2097

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Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA.*

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- 2: /cgn2_6/ptodata/1/ina/5B_COMB.seq.*
- 3: /cgn2_6/ptodata/1/ina/6A_COMB.seq.*
- 4: /cgn2_6/ptodata/1/ina/6B_COMB.seq.*
- 5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq.*
- 6: /cgn2_6/ptodata/1/ina/backfiles.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	ID	Description
1	2095.4	99.9	3259	3	US-09-318-448-23
2	2090.6	99.7	3242	4	US-09-949-016-4215
3	386.4	18.4	390	3	US-08-905-223-71
4	380.6	18.1	601	4	US-09-949-016-150019
5	379.4	18.1	35916	4	US-09-949-016-15957
6	379	18.1	601	4	US-09-949-016-150020
7	190.4	9.1	601	4	US-09-949-016-150037
8	188.8	9.0	601	4	US-09-949-016-150047
9	187.2	8.9	601	4	US-09-949-016-150048
10	186.4	8.9	601	4	US-09-949-016-150046
11	174.4	8.3	2475	4	US-09-566-921-88
12	155.2	7.4	601	4	US-09-949-016-150030
13	154.8	7.4	601	4	US-09-949-016-150031
14	129.2	6.2	244	4	US-09-471-276-495
15	127	6.1	601	4	US-09-949-016-150007
16	126.2	6.0	601	4	US-09-949-016-150029
17	123.4	5.9	601	4	US-09-949-016-150008
18	123.4	5.9	601	4	US-09-949-016-150055
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21	99.4	4.7	601	4	US-09-949-016-150042
22	76	3.6	601	4	US-09-949-016-150018
23	63.6	3.0	4353	2	US-08-365-486A-18
24	63.6	3.0	4353	2	US-08-880-342-18
25	63.6	3.0	4780	2	US-08-365-486A-20
26	63.6	3.0	4780	3	US-09-123-708-3
27	63.6	3.0	4780	3	US-09-123-624-3

ALIGNMENTS

RESULT 1

US-09-318-448-23
; Sequence 23, Application US/09318448
; Patent No. 6210950

GENERAL INFORMATION:

APPLICANT: Johnson, William G.

APPLICANT: Stenroos, Edward S.

TITLE OF INVENTION: METHODS FOR DIAGNOSING, PREVENTING, AND TREATING

FILE REFERENCE: 601-1-057

CURRENT APPLICATION NUMBER: US/09/318,448

CURRENT FILING DATE: 1999-05-25

NUMBER OF SEQ ID NOS: 46

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 23

LENGTH: 3259

TYPE: DNA

ORGANISM: Homo sapiens

US-09-318-448-23

Query Match 99.9%; Score 2095.4; DB 3; Length 3259;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy	1	ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGGAGGCAAGGCCATCGCAGAA	60
Db	80	ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGGCAAGGCCATCGCAGAA	139
Qy	61	GAATGTGTGAGCAAGCTGTGTACATGGATTTCTGCAGATCTTCACTATTAGTGAA	120
Db	140	GAATGTGTGAGCAAGCTGTGTACATGGATTTCTGCAGATCTTCACTATTAGTGAA	199
Qy	121	TCCGATAAGTATGACCTAAACCCGACAGCTCTCTTGTGTGGTTTCTACACAG	180
Db	200	TCCGATAAGTATGACCTAAACCCGACAGCTCTCTTGTGTGGTTTCTACACAG	259
Qy	181	GGACCCGAGAGCCACCCGACAGCCGCAAGTTGTTAAGGAAATACAGAACCAACA	240
Db	260	GGACCCGAGAGCCACCCGACAGCCGCAAGTTGTTAAGGAAATACAGAACCAACA	319
Qy	241	CTGCCGGTTGATTTCTTGTCTCCTCGGTTATGGGTTCTCGGTGATTTCAGAA	300
Db	320	CTGCCGGTTGATTTCTTGTCTCCTCGGTTATGGGTTCTCGGTGATTTCAGAA	379
Qy	301	TACACCTACTTTTGAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGA	360
Db	380	TACACCTACTTTTGAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGA	439
Qy	361	CGGATTTCTATGACCTGTGATGACATGCTGTGTAGTTTGAACCTTGTGGTTGAG	420

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Db 440 CGGCAITCTTATGACACTGGACATGACAGTACCTGTGTAGGTTTGAACCTTGTGTTGAG 499
Qy 421 CCCTGGATTGCTGACTCTGCGCAGCCCTCAGAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 500 CCCTGGATTGCTGACTCTGCGCAGCCCTCAGAAGCAATTTTAGTCAAGCAGAGGACAA 559
Qy 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGCATCTCTTGGAGACAGACTTGTG 540
Db 560 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGCATCTCTTGGAGACAGACTTGTG 619
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
Qy 601 AGAAAGGATTCGAGGTTTGAAGCAAAATGCAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 680 AGAAAGGATTCGAGGTTTGAAGCAAAATGCAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCTCACTTACCCGTTTCGGTACCCCACTCTCAAGCCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCTCACTTACCCGTTTCGGTACCCCACTCTCAAGCCCTCTCTG 799
Qy 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCAAGGTCTCTTGGCCAG 780
Db 800 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCAAGGTCTCTTGGCCAG 859
Qy 781 GAGAAAGCCAAAGTATCTGTGACTTCAAGTACAGTATTCAGTGGCCAAATTCAAAG 840
Db 860 GAGAAAGCCAAAGTATCTGTGACTTCAAGTACAGTATTCAGTGGCCAAATTCAAAG 919
Qy 841 GCAGTTCAACTTACTAGCAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACATTT 900
Db 920 GCAGTTCAACTTACTAGCAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACATTT 979
Qy 901 TCAAAATCAGACTTTTCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAAACAGT 960
Db 980 TCAAAATCAGACTTTTCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAAACAGT 1039
Qy 961 GATTCGAGGTACAAAGCTTACTCMAAGACTGCGACTTGAAGATAAAAGAGAGCACTGC 1020
Db 1040 GATTCGAGGTACAAAGCTTACTCMAAGACTGCGACTTGAAGATAAAAGAGAGCACTGC 1099
Qy 1021 GTCTTTTGAATAAAGGCGAGACACAAAGAAAGAGGAGTACCTTACCCCAAGCATATA 1080
Db 1100 GTCTTTTGAATAAAGGCGAGACACAAAGAAAGAGGAGTACCTTACCCCAAGCATATA 1159
Qy 1081 CCTCGGAGATTTCTCTCCAGTTCAATTTTACCTGGTCTTGAATCCGAGCAATTCCT 1140
Db 1160 CCTCGGAGATTTCTCTCCAGTTCAATTTTACCTGGTCTTGAATCCGAGCAATTCCT 1219
Qy 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACTATACCACTGACGTGCTGAAAGGGCAGG 1200
Db 1220 AAAAAGGCATTTTTCGAGCCCTTGTGACTATACCACTGACGTGCTGAAAGGGCAGG 1279
Qy 1201 CTACAGGAGCTGTGCAGTAAACAGAGGCGCAGCGGATTAAGCCGCTTGTGAGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGCAGTAAACAGAGGCGCAGCGGATTAAGCCGCTTGTGAGAGATGCC 1339
Qy 1261 TGTGCTGCTTGTGAGATCTCTCTCGCTTTCCCTTCTTCCAGCCCACTCAGTCTC 1320
Db 1340 TGTGCTGCTTGTGAGATCTCTCTCGCTTTCCCTTCTTCCAGCCCACTCAGTCTC 1399
Qy 1321 CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
Qy 1381 TTTTCCACCGAGAAAGCTCCATTTTCTTCAACATTTGTGGAATTTCTGCTACTGCCACA 1440
Db 1460 TTTTCCACCGAGAAAGCTCCATTTTCTTCAACATTTGTGGAATTTCTGCTACTGCCACA 1519
Qy 1441 ACAGAGGTTCTCGCGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGCTTCAGTT 1500
Db 1520 ACAGAGGTTCTCGCGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGCTTCAGTT 1579
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Qy 1501 CTTTCAGCCAAACATACATCCCATGAAGACAGCGGAAAGCCCTGGCTCCCTAAGATA 1560
Db 1580 CTTTCAGCCAAACATACATCCCATGAAGACAGCGGAAAGCCCTGGCTCCCTAAGATA 1639
Qy 1561 TCCATCTCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
Db 1640 TCCATCTCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCCATC 1699
Qy 1621 ATAATGTGGTTCAGGAAACCGGATAGCCCGTTTATTTGGGTTCTTACAAATAGAGAG 1680
Db 1700 ATAATGTGGTTCAGGAAACCGGATAGCCCGTTTATTTGGGTTCTTACAAATAGAGAG 1759
Qy 1681 AAACCTCAAGAACAAACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTGGCTGC 1740
Db 1760 AAACCTCAAGAACAAACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTGGCTGC 1819
Qy 1741 AGGATAAGATAGGATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
Db 1820 AGGATAAGATAGGATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1879
Qy 1801 ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCCTGTGGGAGAGGAAAGCC 1860
Db 1880 ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCCTGTGGGAGAGGAAAGCC 1939
Qy 1861 CCAGCAAGTATGTACAGAACACATCCAGCTTCATGCGCAGAGGTGGCGAGATCCTC 1920
Db 1940 CCAGCAAGTATGTACAGAACACATCCAGCTTCATGCGCAGAGGTGGCGAGATCCTC 1999
Qy 1921 CTCAGAGAAAGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCCAAGGATGTA 1980
Db 2000 CTCAGAGAAAGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCCAAGGATGTA 2059
Qy 1981 CATGATCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAGCAATG 2040
Db 2060 CATGATCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAGCAATG 2119
Qy 2041 AAAACCTTGGCCACTTTTAAAGAGAAAGAAAGCGTACCTTCAGGATATTTGGTCTATA 2097
Db 2120 AAAACCTTGGCCACTTTTAAAGAGAAAGAAAGCGTACCTTCAGGATATTTGGTCTATA 2176
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RESULT 2

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US-09-949-016-4215
; Sequence 4215, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4215
; LENGTH: 3242
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4215
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Query Match 99.7%; Score 2090.6; DB 4; Length 3242;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
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Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGGACGAAAGCCATCCAGAA 60
|||||
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APPLICANT: Lacroix, Bruno
TITLE OF INVENTION: 5' ESTs FOR SECRETED PROTEINS
NUMBER OF SEQUENCES: 503
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 501 West Broadway
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-3505
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy Disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Win95
SOFTWARE: Word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/905,223
FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Israel, Ned A.
REGISTRATION NUMBER: 29,655
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 235-8550
TELEFAX: (619) 235-0176
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 390 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: DOUBLE
TOPOLOGY: LINEAR
MOLECULE TYPE: CDNA
ORIGINAL SOURCE:
ORGANISM: Homo Sapiens
TISSUE TYPE: Brain
FEATURE:
NAME/KEY: sig_peptide
LOCATION: 289..357
IDENTIFICATION METHOD: Von Heijne matrix
OTHER INFORMATION: score 6.9
OTHER INFORMATION: seq SL5LLASHSVSC/SN

US-08-905-223-71

Query Match 18.4%; Score 386.4; DB 3; Length 390;
Best Local Similarity 99.7%; Pred. No. 2.6e-119;
Matches 387; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 968 AGGTACAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGACACTGCGTCCTTT 1027
DB 1 AAGTACAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGACACTGCGTCCTTT 60

QY 1028 TGAAATAAAGGCGAGACACAAAGAGAGAGCTTACCTTACCCGAGCATATACCTGCGG 1087
DB 61 TGAAATAAAGGCGAGACACAAAGAGAGAGCTTACCTTACCCGAGCATATACCTGCGG 120

QY 1088 GATGTTCTCTCAGTTTATTTTACTGCTGTTGAATTCGAGCAATTCCTTAAAGG 1147
DB 121 GATGTTCTCTCAGTTTATTTTACTGCTGTTGAATTCGAGCAATTCCTTAAAGG 180

QY 1148 CATTTTTCGAGCCCTTGGGACTATACGAGTACGAGTCTGAAAGCGCAGGCTACAGG 1207
DB 181 CATTTTTCGAGCCCTTGGGACTATACGAGTACGAGTCTGAAAGCGCAGGCTACAGG 240

QY 1208 AGCTGTGAGTAAACAAAGGCGAGCCGATTATAGCCGCTTTGTACGAGATGCTGTGCT 1267
DB 241 AGCTGTGAGTAAACAAAGGCGAGCCGATTATAGCCGCTTTGTACGAGATGCTGTGCT 300

QY 1268 GCTTGTGAGTCTCTCTCTGCTTCCCTTCTTGTGCGAGCACCACTCAGTCTCTGCTCG 1327
DB 301 GCTTGTGAGTCTCTCTCTGCTTCCCTTCTTGTGCGAGCACCACTCAGTCTCTGCTCG 360

QY 1328 AACATCTTCTTAAACTTCAACCCAGACC 1355

DB 361 AACATCTTCTTAAACTTCAACCCAGACC 388

RESULT 4
US-09-949-016-150019
Sequence 150019, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 150019
LENGTH: 601
TYPE: DNA
ORGANISM: Human
US-09-949-016-150019

Query Match 18.1%; Score 380.6; DB 4; Length 601;
Best Local Similarity 99.7%; Pred. No. 3.2e-117;
Matches 380; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGACTCTTGCCAGCCCTCAGAAAGCAT 460
DB 178 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGACTCTTGCCAGCCCTCAGAAAGCAT 237

QY 461 TTAGTCAAGCAGAGGACAGAGGAGATAGTGGCGCACTCCCGTGGCATCCTGCAT 520
DB 238 TTAGTCAAGCAGAGGACAGAGGAGATAGTGGCGCACTCCCGTGGCATCCTGCAT 297

QY 521 CTTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 580
DB 298 CTTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 357

QY 581 TGAGATTGATGATTCAGGAGAAAGGATTCTGAGGTTTGAAGCAAAATGCGAGTGAACA 640
DB 358 TGAGATTGATGATTCAGGAGAAAGGATTCTGAGGTTTGAAGCAAAATGCGAGTGAACA 417

QY 641 GCAACCAATCCAATGTTGTAATTCGAAGCTTTGAGTCTCTACCTTACCCGTTTCGGTACCCC 700
DB 418 GCAACCAATCCAATGTTGTAATTCGAAGCTTTGAGTCTCTACCTTACCCGTTTCGGTACCCC 477

QY 701 CACTCTCAAGCCCTCTCTGAATATTCCTGTTTACCCGAGAAATATTACAGGTACATC 760
DB 478 CACTCTCAAGCCCTCTCTGAATATTCCTGTTTACCCGAGAAATATTACAGGTACATC 537

QY 761 TGCAGGAGTCTCTTGGCCAGG 781
DB 538 TGCAGGAGTCTCTTGGCCAGG 558

RESULT 5
US-09-949-016-15957
Sequence 15957, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14

;; PRIOR APPLICATION NUMBER: 60/241,755
;; PRIOR FILING DATE: 2000-10-20
;; PRIOR APPLICATION NUMBER: 60/237,768
;; PRIOR FILING DATE: 2000-10-03
;; PRIOR APPLICATION NUMBER: 60/231,498
;; PRIOR FILING DATE: 2000-09-08
;; NUMBER OF SEQ ID NOS: 207012
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 15957
;; LENGTH: 35916
;; TYPE: DNA
;; ORGANISM: Human
US-09-949-016-15957

Query Match 18.1%; Score 379.4; DB 4; Length 35916;

Best Local Similarity 99.7%; Pred. No. 1.8e-115;
Matches 380; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 401 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 460
Db 10781 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 10840
Qy 461 TTAGTCAAGCAGAGGACAAAGAGGATAAGTGGCGCACTCCCGTGGCATCAGCTGCAT 520
Db 10841 TTAGTCAAGCAGAGGACAAAGAGGATAAGTGGCGCACTCCCGTGGCATCAGCTGCAT 10900
Qy 521 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 580
Db 10901 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 10960
Qy 581 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATCGAGTGAACA 640
Db 10961 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATCGAGTGAACA 11020
Qy 641 GCAACCAATCAATGTTCTGAATATTCCTGGTTTACCCCGAGATATTTACAGGTACATC 700
Db 11021 GCAACCAATCAATGTTCTGAATATTCCTGGTTTACCCCGAGATATTTACAGGTACATC 11080
Qy 701 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGAGATATTTACAGGTACATC 760
Db 11081 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGAGATATTTACAGGTACATC 11140
Qy 761 TGCAGGAGTCTCTGGCCAGG 781
Db 11141 TGCAGGAGTCTCTGGCCAGG 11161

RESULT 6
US-09-949-016-150020
; Sequence 150020, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150020
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150020

Query Match 18.1%; Score 379; DB 4; Length 601;

Best Local Similarity 99.5%; Pred. No. 1.1e-116;
Matches 379; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 401 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 460
Db 165 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 224
Qy 461 TTAGTCAAGCAGAGGACAAAGAGGATAAGTGGCGCACTCCCGTGGCATCAGCTGCAT 520
Db 225 TTAGTCAAGCAGAGGACAAAGAGGATAAGTGGCGCACTCCCGTGGCATCAGCTGCAT 284
Qy 521 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 580
Db 285 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 344
Qy 581 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATCGAGTGAACA 640
Db 345 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATCGAGTGAACA 404
Qy 641 GCAACCAATCAATGTTCTGAATATTCCTGGTTTACCCCGAGATATTTACAGGTACATC 700
Db 405 GCAACCAATCAATGTTCTGAATATTCCTGGTTTACCCCGAGATATTTACAGGTACATC 464
Qy 701 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGAGATATTTACAGGTACATC 760
Db 465 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGAGATATTTACAGGTACATC 524
Qy 761 TGCAGGAGTCTCTGGCCAGG 781
Db 525 TGCAGGAGTCTCTGGCCAGG 545

RESULT 7
US-09-949-016-150037
; Sequence 150037, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150037
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150037

Query Match 9.1%; Score 190.4; DB 4; Length 601;
Best Local Similarity 99.5%; Pred. No. 4.7e-53;
Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1369 AGCTCAAGTTTATTTTACCAGGAAAGCTCCATTTTGTCTTCAACATTGTGGAATTTCTG 1428
Db 18 AGCTCAAGTTTATTTTACCAGGAAAGCTCCATTTTGTCTTCAACATTGTGGAATTTCTG 77
Qy 1429 TCTACTGCCAACACAGAGGTTCTCGGAGGAGATGTATACAGGTGGCTGGCTTGTGTTG 1488
Db 78 TCTACTGCCAACACAGAGGTTCTCGGAGGAGATGTATACAGGTGGCTGGCTTGTGTTG 137
Qy 1489 GTTGCTTCAGTTCTTTCAGCCAAACATACATCCTCCATCCATGAAGACAGCGGAAAGCCCTG 1548
Db 138 GTTGCTTCAGTTCTTTCAGCCAAACATACATCCTCCATCCATGAAGACAGCGGAAAGCCCTG 197

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Qy 1549 GCTCCTAAGATA 1560
      |||||
Db 198 GCTCCTAAGGTA 209

RESULT 8
US-09-949-016-150047
; Sequence 150047, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150047
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150047

Query Match 9.0%; Score 188.8; DB 4; Length 601;
Best Local Similarity 93.3%; Pred. No. 1.6e-52;
Matches 196; Conservative 1; Mismatches 13; Indels 0; Gaps 0;

Qy 1765 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1824
Db 191 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 250

Qy 1825 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTAGTATGTACAAGACAAC 1884
Db 251 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTAGTATGTACAAGACAAC 310

Qy 1885 ATCCAGCTTTCATGCCAGCAGTGCGGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 1944
Db 311 ATCCAGCTTTCATGCCAGCAGTGCGGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 370

Qy 1945 GTGTGTGGAGATGCAAGAATAATGCGCCAAG 1974
Db 371 GTGTGTGGTGAGTCATTATCGTGCCTAAG 400

RESULT 9
US-09-949-016-150048
; Sequence 150048, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150048
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150048
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; ORGANISM: Human
US-09-949-016-150048

Query Match 8.9%; Score 187.2; DB 4; Length 601;
Best Local Similarity 92.9%; Pred. No. 5.7e-52;
Matches 195; Conservative 1; Mismatches 14; Indels 0; Gaps 0;

Qy 1765 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1824
Db 155 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 214

Qy 1825 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTAGTATGTACAAGACAAC 1884
Db 215 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTAGTATGTACAAGACAAC 274

Qy 1885 ATCCAGCTTTCATGCCAGCAGTGCGGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 1944
Db 275 ATCCAGCTTTCATGCCAGCAGTGCGGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 334

Qy 1945 GTGTGTGGAGATGCAAGAATAATGCGCCAAG 1974
Db 335 GTGTGTGGTGAGTCATTATCGTGCCTAAG 364

RESULT 10
US-09-949-016-150046
; Sequence 150046, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150046
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150046

Query Match 8.9%; Score 186.4; DB 4; Length 601;
Best Local Similarity 99.5%; Pred. No. 1.1e-51;
Matches 187; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1765 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1824
Db 413 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 472

Qy 1825 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTAGTATGTACAAGACAAC 1884
Db 473 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTAGTATGTACAAGACAAC 532

Qy 1885 ATCCAGCTTTCATGCCAGCAGTGCGGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 1944
Db 533 ATCCAGCTTTCATGCCAGCAGTGCGGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 592

Qy 1945 GTGTGTGG 1952
Db 593 GTGTGTGG 600

RESULT 11
US-09-566-921-88
; Sequence 88, Application US/09566921
```


Patent No. 6682888
; GENERAL INFORMATION:
; APPLICANT: Loring, Jeanne F.
; APPLICANT: Tingley, Debora W.
; APPLICANT: Edwards, Carla M.
; TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE
; FILE REFERENCE: PA-0224 US
; CURRENT APPLICATION NUMBER: US/09/566,921
; CURRENT FILING DATE: 2000-05-05
; NUMBER OF SEQ ID NOS: 138
; SOFTWARE: PERL Program
; SEQ ID NO 88
; LENGTH: 2475
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6682888 255828.26
; NAME/KEY: unsure
; LOCATION: 1001, 1011
; OTHER INFORMATION: a, t, c, g, or other
US-09-566-921-88

Query Match 8.3%; Score 174.4; DB 4; Length 2475;
Best Local Similarity 96.7%; Pred. No. 3.4e-47;
Matches 178; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
QY 510 ATCACTCGATCTTGGAGACAGACTTGTGAAGTCAGAGCTGCTACACATTTGAATCTCA 569
DB 1 ATCACTCGATCTTGGAGACAGACTTGTGAAGTCAGAGCTGCTACACATTTGAATCTCA 60
QY 570 AGTCAGGCTTTCGATTCGATTCGATTCAGGAGAAAGGATTCGAGGTTTTGAAGCAAAA 629
DB 61 AGTCAGGCTTTCGATTCGATTCGATTCAGGAGAAAGGATTCGAGGTTTTGAAGCAAAA 120
QY 630 TGCAGTGAACGACCAACCAATCTTGAATTCGAAGCTTGAATTCCTACCTACCG 689
DB 121 TGCAGTGAACGACCAACCAATCTTGAATTCGAAGCTTGAATTCCTACCGATCTC 180
QY 690 TTGC 693
DB 181 TTGC 184

RESULT 12
US-09-949-016-150030
; Sequence 150030, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 150030
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150030

Query Match 7.4%; Score 155.2; DB 4; Length 601;
Best Local Similarity 98.1%; Pred. No. 3.5e-41;
Matches 157; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 899 TTTCAAATACAGACTTTTCTTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 958
DB 315 TCTAGAAATACAGACTTTTCTTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 374
QY 959 GTGATTCCTGAGTACAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 1018
DB 375 GTGATTCCTGAGTACAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 434
QY 1019 GCGTCCTTTTGAATAAAGGCAGACACACAAAGAAAGG 1058
DB 435 GCGTCCTTTTGAATAAAGGCAGACACACAAAGAAAGG 474

RESULT 13
US-09-949-016-150031
; Sequence 150031, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 150031
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150031

Query Match 7.4%; Score 154.8; DB 4; Length 601;
Best Local Similarity 97.5%; Pred. No. 4.8e-41;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 899 TTTCAAATACAGACTTTTCTTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 958
DB 151 TCTAGAAATACAGACTTTTCTTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 210
QY 959 GTGATTCCTGAGTACAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 1018
DB 211 GTGATTCCTGAGTACAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 270
QY 1019 GCGTCCTTTTGAATAAAGGCAGACACACAAAGAAAGG 1058
DB 271 GCGTCCTTTTGAATAAAGGCAGACACACAAAGAAAGG 310

RESULT 14
US-09-471-276-495
; Sequence 495, Application US/09471276
; Patent No. 6822072
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6822072
; FILE REFERENCE: GENSET.025CPI
; CURRENT APPLICATION NUMBER: US/09/471,276
; CURRENT FILING DATE: 1999-12-21
; EARLIER APPLICATION NUMBER: 09/057,719
; EARLIER FILING DATE: 1998-04-09
; EARLIER APPLICATION NUMBER: 09/069,047
; EARLIER FILING DATE: 1998-04-28
; EARLIER APPLICATION NUMBER: PCT/IB99/00712

; EARLIER FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1622
; SOFTWARE: Patent.pm
; SEQ ID NO 495
; LENGTH: 244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 70..243
; NAME/KEY: sig_peptide
; LOCATION: 70..114
; OTHER INFORMATION: Von Heijne matrix
; OTHER INFORMATION: score 4.40000009536743
; OTHER INFORMATION: seq RFLLLYATQQQA/KA
US-09-471-276-495

Query Match 6.2%; Score 129.2; DB 4; Length 244;
Best Local Similarity 87.5%; Pred. No. 1.1e-32;
Matches 140; Conservative 1; Mismatches 19; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTTCGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 70 ATGAGGAGGTTTCGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 129
Qy 61 GAAATGTGTGAGCAAGCTGTGGTACATGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Db 130 GAAATGTGTGAGCAAGCTGTGGTACATGATTTTCTGCAGATCTTCACTATATTAGTGAA 189
Qy 121 TCCGATAAGTATGACCTAAACCGAAACAGCTCTCTTTG 160
Db 190 TCCGATAAGGTCGCGTGATTCAGAATACACCTACTTTTG 229

RESULT 15

US-09-949-016-150007
; Sequence 150007, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150007
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150007

Query Match 6.1%; Score 127; DB 4; Length 601;
Best Local Similarity 98.4%; Pred. No. 1.2e-31;
Matches 127; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTTCGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 236 ATGAGGAGGTTTCGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 295
Qy 61 GAAATGTGTGAGCAAGCTGTGGTACATGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Db 296 GAAATGTGTGAGCAAGCTGTGGTACATGATTTTCTGCAGATCTTCACTATATTAGTGAA 355
Qy 121 TCCGATAAG 129
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Db 356 TCCGATAAG 364

Search completed: November 8, 2005, 17:00:51
Job time : 236.757 secs

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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 16:35:10 ; Search time 1123.15 Seconds
(without alignments)
15440.336 Million cell updates/sec

Title: US-09-371-347A-43

Perfect score: 2097

Sequence: 1 atgaggagggtttctgtact.....ttcaggatatgtgctataa 2097

Scoring table:

IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 9794790 seqs, 4134909567 residues

Total number of hits satisfying chosen parameters: 19589580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:*

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- 2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
- 3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq.*
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- 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
- 13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
- 14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq.*
- 15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq.*
- 16: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq.*
- 17: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq.*
- 18: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
- 19: /cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq.*
- 20: /cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq.*
- 21: /cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq.*
- 22: /cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
- 23: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
- 24: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq.*
- 25: /cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
- 26: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
- 27: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
- 28: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2097	100.0	2097	10	US-09-371-347-43
2	2097	100.0	2097	26	US-11-119-096-43
3	2095.4	99.9	2097	10	US-09-371-347-1
4	2095.4	99.9	2097	26	US-11-119-096-1
5	2095.4	99.9	3259	10	US-09-371-347-24

6	2095.4	99.9	3259	24	US-10-450-763-874	Sequence 874, App
7	2095.4	99.9	3259	26	US-11-119-096-24	Sequence 24, Appl
8	2093.8	99.8	2097	10	US-09-371-347-41	Sequence 41, Appl
9	2093.8	99.8	2097	26	US-11-119-096-41	Sequence 41, Appl
10	2087	99.5	3256	22	US-10-741-600-692	Sequence 692, App
11	2087	99.5	3274	22	US-10-741-600-693	Sequence 693, App
12	2079.4	99.2	2094	10	US-09-371-347-45	Sequence 45, Appl
13	2079.4	99.2	2094	26	US-11-119-096-45	Sequence 45, Appl
14	2077.4	99.1	2093	10	US-09-371-347-47	Sequence 47, Appl
15	2077.4	99.1	2093	26	US-11-119-096-47	Sequence 47, Appl
16	379.8	18.1	43985	22	US-10-741-600-17757	Sequence 17757, A
17	379.8	18.1	591	17	US-10-029-386-6359	Sequence 6359, Ap
18	377.8	18.0	591	17	US-10-029-386-1735	Sequence 1735, Ap
19	377.4	18.0	379	17	US-10-029-386-20100	Sequence 20100, A
20	375.8	17.9	379	17	US-10-029-386-15435	Sequence 15435, A
21	286	13.6	583	13	US-09-925-065A-758988	Sequence 758988,
22	284.8	13.6	583	13	US-09-925-065A-827971	Sequence 827971,
23	275.8	13.2	503	24	US-10-450-763-873	Sequence 873, App
24	200.6	9.6	201	22	US-10-741-600-15583	Sequence 15583, A
25	200.6	9.6	201	22	US-10-741-600-15584	Sequence 15584, A
26	200.6	9.6	201	22	US-10-741-600-15589	Sequence 15589, A
27	200.6	9.6	201	22	US-10-741-600-15590	Sequence 15590, A
28	200.6	9.6	201	22	US-10-741-600-15592	Sequence 15592, A
29	200.6	9.6	201	22	US-10-741-600-15593	Sequence 15593, A
30	200.6	9.6	201	22	US-10-741-600-15594	Sequence 15594, A
31	200.6	9.6	201	22	US-10-741-600-15598	Sequence 15598, A
32	200.6	9.6	201	22	US-10-741-600-15599	Sequence 15599, A
33	200.6	9.6	201	22	US-10-741-600-15600	Sequence 15600, A
34	200.6	9.6	201	22	US-10-741-600-15602	Sequence 15602, A
35	200.6	9.6	201	22	US-10-741-600-15606	Sequence 15606, A
36	200.6	9.6	201	22	US-10-741-600-15609	Sequence 15609, A
37	200.6	9.6	201	22	US-10-741-600-15610	Sequence 15610, A
38	200.6	9.6	201	22	US-10-741-600-15612	Sequence 15612, A
39	200.6	9.6	201	22	US-10-741-600-15613	Sequence 15613, A
40	200.6	9.6	201	22	US-10-741-600-15614	Sequence 15614, A
41	200.6	9.6	201	22	US-10-741-600-15620	Sequence 15620, A
42	200.6	9.6	201	22	US-10-741-600-15621	Sequence 15621, A
43	200.6	9.6	201	22	US-10-741-600-15623	Sequence 15623, A
44	200.6	9.6	201	22	US-10-741-600-15624	Sequence 15624, A
45	200.6	9.6	201	22	US-10-741-600-15625	Sequence 15625, A

ALIGNMENTS

RESULT 1

US-09-371-347-43
; Sequence 43, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371.347
; CURRENT FILING DATE: 1999-08-10
; PRIOR FILING DATE: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-43

Query Match 100.0%; Score 2097; DB 10; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGGAGTTCTGTGTACTATATGCTACAGCAGGACAGCAAGGCCATCGCAGAA 60
DB |||||
1 ATGAGGAGTTCTGTGTACTATATGCTACAGCAGGACAGCAAGGCCATCGCAGAA 60
QY 61 GAAATGTGTAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
DB |||||
61 GAAATGTGTAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
QY 121 TCCGATTAAGTATGACTAAACCGAACCGAACAGCTCTCTTGTGTGTGGTTCTTACCACG 180
DB |||||
121 TCCGATTAAGTATGACTAAACCGAACCGAACAGCTCTCTTGTGTGTGGTTCTTACCACG 180
QY 181 GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
DB |||||
181 GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
QY 241 CTGCCGTTGATTTCTTTGTCTCACCTGCGGTATGGGTTACTGGGTCTCGGTGATTTCAGAA 300
DB |||||
241 CTGCCGTTGATTTCTTTGTCTCACCTGCGGTATGGGTTACTGGGTCTCGGTGATTTCAGAA 300
QY 301 TACACCTACTTTTGGAAATGGGGGGAAGATTAATTCGATTAACGACTTCAAGAGCTTGGAGCC 360
DB |||||
301 TACACCTACTTTTGGAAATGGGGGGAAGATTAATTCGATTAACGACTTCAAGAGCTTGGAGCC 360
QY 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTGTAGAACTTGTGTTGAG 420
DB |||||
361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTGTAGAACTTGTGTTGAG 420
QY 421 CCGTGGATTGCTGGACTCTGSCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
DB |||||
421 CCGTGGATTGCTGGACTCTGSCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
QY 481 GAGAGATAAGTGGGCACTCCCGTGCGATCACTGCGATCCTTGAGGACAGACTTGTG 540
DB |||||
481 GAGAGATAAGTGGGCACTCCCGTGCGATCACTGCGATCCTTGAGGACAGACTTGTG 540
QY 541 AAGTCAGAGCTGTACACATTTGAACTTCAAGTCAGAGCTTCTGAGATTCGATGATTTCAGGA 600
DB |||||
541 AAGTCAGAGCTGTACACATTTGAACTTCAAGTCAGAGCTTCTGAGATTCGATGATTTCAGGA 600
QY 601 AGAAAGGATCTGAGGTTTGAAGCAAAATGCAGTGAAACAGCAACCAATCCAAATGTTGTA 660
DB |||||
601 AGAAAGGATCTGAGGTTTGAAGCAAAATGCAGTGAAACAGCAACCAATCCAAATGTTGTA 660
QY 661 ATTGAGAGCTTGTAGTCTCTACTTACCCGTTCCGTTCCGTTCCGTTCCGTTCCGTTCCGTT 720
DB |||||
661 ATTGAGAGCTTGTAGTCTCTACTTACCCGTTCCGTTCCGTTCCGTTCCGTTCCGTTCCGTT 720
QY 721 AATATTCCTGTTTACCCCGAGAAATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
DB |||||
721 AATATTCCTGTTTACCCCGAGAAATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 840
DB |||||
781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACATTT 900
DB |||||
841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACATTT 900
QY 901 TCAATACAGACTTTTCTCTATCAGCTCGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
DB |||||
901 TCAATACAGACTTTTCTCTATCAGCTCGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
QY 961 GATTCGAGGTACAAAGCTTACTCCAAAGACTGCAAGTTGAAGTAAAGAGAGCACTTGC 1020
DB |||||
961 GATTCGAGGTACAAAGCTTACTCCAAAGACTGCAAGTTGAAGTAAAGAGAGCACTTGC 1020
QY 1021 GTCTTTTGAATAAAGCGACACAAAGAAAGAGGAGTACCTTACCCGACATATA 1080
DB |||||
1021 GTCTTTTGAATAAAGCGACACAAAGAAAGAGGAGTACCTTACCCGACATATA 1080
QY 1081 CCTGGGATGTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140

DB 1081 CCTGGGATGTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
QY 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGCTGAAAAGCGCAGG 1200
DB |||||
1141 AAAAAGGCATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGCTGAAAAGCGCAGG 1200
QY 1201 CTACAGAGCTGTGCAGTAACAAAGGGGACCGATTTATAGCCCTTTGTACGAGATGCC 1260
DB |||||
1201 CTACAGAGCTGTGCAGTAACAAAGGGGACCGATTTATAGCCCTTTGTACGAGATGCC 1260
QY 1261 TGTGCTGTCTTGTGTGATCTCTCTCGCTTTCCTTTCCTTTCCTTTCCTTTCCTTTCCTTTC 1320
DB |||||
1261 TGTGCTGTCTTGTGTGATCTCTCTCGCTTTCCTTTCCTTTCCTTTCCTTTCCTTTCCTTTC 1320
QY 1321 CTGCTCGAAATCTTCTTAACTTCAACCCAGACATATTCGTTGGAATTTCTGTCTACTGCCACA 1380
DB |||||
1321 CTGCTCGAAATCTTCTTAACTTCAACCCAGACATATTCGTTGGAATTTCTGTCTACTGCCACA 1380
QY 1381 TTTTCAACCCAGAAAGCTCCATTTTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
DB |||||
1381 TTTTCAACCCAGAAAGCTCCATTTTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGTTCTGCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTTCAGTT 1500
DB |||||
1441 ACAGAGTTCTGCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTTCAGTT 1500
QY 1501 CTTTCAACCCAAATATCATGATCCCATGAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1560
DB |||||
1501 CTTTCAACCCAAATATCATGATCCCATGAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1560
QY 1561 TCCATCTCTCTCGAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
DB |||||
1561 TCCATCTCTCTCGAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
QY 1621 ATATGTGTGGTCCAGGAAAGGAGATGATGTATTTGGGTTTATTTGGGTTTCTTAAAGATGAG 1680
DB |||||
1621 ATATGTGTGGTCCAGGAAAGGAGATGATGTATTTGGGTTTCTTAAAGATGAGAGAG 1680
QY 1681 AAATCCAGAAACAAACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTTTGGGCTGC 1740
DB |||||
1681 AAATCCAGAAACAAACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTTTGGGCTGC 1740
QY 1741 AGGATTAAGGATAGGATTTATTTTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
DB |||||
1741 AGGATTAAGGATAGGATTTATTTTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
QY 1801 ATCTTAACTCATCTTAAAGTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGAGAGAGCC 1860
DB |||||
1801 ATCTTAACTCATCTTAAAGTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGAGAGCC 1860
QY 1861 CCAGCAAAAGTATGTACAAAGCAACATCCAGCTTTCATGGCCAGCAGGTGGCCAGAGATCCTC 1920
DB |||||
1861 CCAGCAAAAGTATGTACAAAGCAACATCCAGCTTTCATGGCCAGCAGGTGGCCAGAGATCCTC 1920
QY 1921 CTCCAGAGAGACGCCATTTTATGTGTGGAGATGCAAGATATGGCCAAAGATGTA 1980
DB |||||
1921 CTCCAGAGAGACGCCATTTTATGTGTGGAGATGCAAGATATGGCCAAAGATGTA 1980
QY 1981 CATGATGCCCTTGTGCAAAATTAAGCAAGAGGTGGAGTTGAAAACCTAGAGCAATG 2040
DB |||||
1981 CATGATGCCCTTGTGCAAAATTAAGCAAGAGGTGGAGTTGAAAACCTAGAGCAATG 2040
QY 2041 AAAACCTTGGCCATTTTAAAG 2097
DB |||||
2041 AAAACCTTGGCCATTTTAAAG 2097

RESULT 2

US-11-119-096-43
; Sequence 43, Application US/1119096
; Publication No. US2005019101A1
; GENERAL INFORMATION:

QY 1381 TTTCCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCGACA 1440
Db 1381 TTTCCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCGACA 1440
QY 1441 ACAGAGGTTCTGCGAAGGGAGTATGTACAGCTGGCTGGCTTGTGTTGCTTTCAGTT 1500
Db 1441 ACAGAGGTTCTGCGAAGGGAGTATGTACAGCTGGCTGGCTTGTGTTGCTTTCAGTT 1500
QY 1501 CTTCCAGCAAAACATACATGCTATCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Db 1501 CTTCCAGCAAAACATACATGCTATCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
QY 1561 TCCATCTCTCTCGNACAAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCATC 1620
Db 1561 TCCATCTCTCTCGNACAAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCATC 1620
QY 1621 ATAATGTGGGTCCAGGAACCGGCATACCGCTTTATTTGGGTTCTTCAACATAGAGAG 1680
Db 1621 ATAATGTGGGTCCAGGAACCGGCATACCGCTTTATTTGGGTTCTTCAACATAGAGAG 1680
QY 1681 AAATCTCAAGAAACAAACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
Db 1681 AAATCTCAAGAAACAAACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
QY 1741 AGGCATAAGGATAGGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db 1741 AGGCATAAGGATAGGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
QY 1801 ATCTTAAGTATAGGATTTCTTCTCAGAGATGCTCTGTTGGGAGGAGGAGGCC 1860
Db 1801 ATCTTAAGTATAGGATTTCTTCTCAGAGATGCTCTGTTGGGAGGAGGAGGCC 1860
QY 1861 CCAGCAAAAGTATGACAAAGCAACATCCAGCTTCATGGCCAGCAGGTGGCGAGATCTC 1920
Db 1861 CCAGCAAAAGTATGACAAAGCAACATCCAGCTTCATGGCCAGCAGGTGGCGAGATCTC 1920
QY 1921 CTCAGAGAAACGGCCATATTTATGTGTGGAGATGCAAGATATGCGCAAGATGTA 1980
Db 1921 CTCAGAGAAACGGCCATATTTATGTGTGGAGATGCAAGATATGCGCAAGATGTA 1980
QY 1981 CATGATGCCCTTGTGCAAAATATAGCAAGAGGTTGGAGTTGAAACTAGAGCAATG 2040
Db 1981 CATGATGCCCTTGTGCAAAATATATAGCAAGAGGTTGGAGTTGAAACTAGAGCAATG 2040
QY 2041 AAAACCTGGCCACTTTTAAAGAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA 2097
Db 2041 AAAACCTGGCCACTTTTAAAGAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA 2097

RESULT 4
US-11-119-096-1
; Sequence 1, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16

; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-1

Query Match 99.9%; Score 2095.4; DB 26; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGGACAGGCAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGGACAGGCAAGGCCATCGCAGAA 60
QY 61 GAAATGTGTAGCAAGCTGTGTACATGGAATTTCTGCAGATCTTCACTGATTAGTGA 120
Db 61 GAAATGTGTAGCAAGCTGTGTACATGGAATTTCTGCAGATCTTCACTGATTAGTGA 120
QY 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTTGTTGTTTCTACCA 180
Db 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTTGTTTCTACCA 180
QY 181 GGCAACCGAGAGACCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAAACAAACA 240
Db 181 GGCAACCGAGAGACCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAAACAAACA 240
QY 241 CTGCGGTTGATTTCTTGTCTCAGCTGGGTATGCGGTACTGCGGTCTCGGTGATTCA 300
Db 241 CTGCGGTTGATTTCTTGTCTCAGCTGGGTATGCGGTACTGCGGTCTCGGTGATTCA 300
QY 301 TACACCTACTTTTGCATGCGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATGCGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
QY 361 CGGCAATTTCTATGACATGCGACATGACGTGTGTAGTTTGAACCTTGTGTTGAG 420
Db 361 CGGCAATTTCTATGACATGCGACATGACGTGTGTAGTTTGAACCTTGTGTTGAG 420
QY 421 CCGTGGATGCTGCACTCTGCGGAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACA 480
Db 421 CCGTGGATGCTGCACTCTGCGGAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACA 480
QY 481 GAGGAGATAGTGGCGCACTCCCGGTGGCATCACTGTCATCTTGGAGGACAGACTTGTG 540
Db 481 GAGGAGATAGTGGCGCACTCCCGGTGGCATCACTGTCATCTTGGAGGACAGACTTGTG 540
QY 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 600
QY 601 AGAAGGATTCGAGGTTTGAAGCAAAATGCACTGAGTGAACAGCAACCAATCCAAATGTTGA 660
Db 601 AGAAGGATTCGAGGTTTGAAGCAAAATGCACTGAGTGAACAGCAACCAATCCAAATGTTGA 660
QY 661 ATTCAAGACTTTGAGTCTCTCACTTACCGTTTGGTACCCTTCAAGAGCTTCTCTG 720
Db 661 ATTCAAGACTTTGAGTCTCTCACTTACCGTTTGGTACCCTTCAAGAGCTTCTCTG 720
QY 721 AATATTCCTGTTTACCCCGCAAGATAATTTACAGGTATACATCTGAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCGCAAGATAATTTACAGGTATACATCTGAGGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCCCAAGTATCTGTGACTTTCAGGAGTCCAGTTTTCAGTGCCCAATTTCAAAG 840
Db 781 GAGGAAAGCCCAAGTATCTGTGACTTTCAGGAGTCCAGTTTTCAGTGCCCAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTGGACATT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTGGACATT 900
QY 901 TCAAAATACAGACTTTTCTCTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960

Db 901 TCATAACAGACTTTCTCTACAGCCTGGAGATGCCCTTACGGTGATCTGCCCTAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCCTACTCAAGAAGCTGAGCTTGAAGATAAAGAGAGAGCACTGC 1020
Db 961 GATTCTGAGGTACAAAGCCTACTCAAGAAGCTGAGCTTGAAGATAAAGAGAGAGCACTGC 1020
Qy 1021 GTCCCTTTGAAAATAAAGGCGAGACACAAGAGAAAGGAGCTACCTTACCCCGACATATA 1080
Db 1021 GTCCCTTTGAAAATAAAGGCGAGACACAAGAGAAAGGAGCTACCTTACCCCGACATATA 1080
Qy 1081 CCTCGGGGATGTTCTCTCCAGTTCATTTTACCTGGTCTTGGAAATCCGAGCAATTCCT 1140
Db 1081 CCTCGGGGATGTTCTCTCCAGTTCATTTTACCTGGTCTTGGAAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCAATTTTGGCGAGCCCTTGTGAGCATATACAGTGCAGTGTGAAAAGGCGAGG 1200
Db 1141 AAAAAGGCAATTTTGGCGAGCCCTTGTGAGCATATACAGTGCAGTGTGAAAAGGCGAGG 1200
Qy 1201 CTACAGGAGCTGCGAGTAAACAGAGGGGCGAGCGCATATATAGCCGCTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGCGAGTAAACAGAGGGGCGAGCGCATATATAGCCGCTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTGTTGGATCTCCTCTCGCTTTCCTCTTCCCTTCTTCCAGCCACCACTCAGTCTC 1320
Db 1261 TGTGCTGCTGTTGGATCTCCTCTCGCTTTCCTCTTCCCTTCTTCCAGCCACCACTCAGTCTC 1320
Qy 1321 CTGCTCGAACAATCTTCTTAAATCTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAACAATCTTCTTAAATCTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTTACCAGGAAGCTCCATTTTGTCTTCAACATTTGGAAATTTCTCTACTGCCACA 1440
Db 1381 TTTTACCAGGAAGCTCCATTTTGTCTTCAACATTTGGAAATTTCTCTACTGCCACA 1440
Qy 1441 ACAGAGGTTCTCGGGAAGGAGTATGTACAGCTGGCTGGCTTGTGGTTCCTTCAGTT 1500
Db 1441 ACAGAGGTTCTCGGGAAGGAGTATGTACAGCTGGCTGGCTTGTGGTTCCTTCAGTT 1500
Qy 1501 CTTCAGCAAAACATACATATGCCATCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Db 1501 CTTCAGCAAAACATACATATGCCATCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCATC 1620
Qy 1621 ATAATGTTGGTCCAGGAACCGGCATAGCCCGCTTTATTTGGGTTCTTACAAACATAGAG 1680
Db 1621 ATAATGTTGGTCCAGGAACCGGCATAGCCCGCTTTATTTGGGTTCTTACAAACATAGAG 1680
Qy 1681 AAATCCAAAGAACACACCCAGATGGAAATTTTGAGCAATTTGGTGTGTTTTTGGCTGC 1740
Db 1681 AAATCCAAAGAACACACCCAGATGGAAATTTTGAGCAATTTGGTGTGTTTTTGGCTGC 1740
Qy 1741 AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db 1741 AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Qy 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCC 1860
Db 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCC 1860
Qy 1861 CCAGCAAAATGTATCAAGAACATCCAGCTTTCATGCGCAGCAGGTTGGCGAGAAATCCTC 1920
Db 1861 CCAGCAAAATGTATCAAGAACATCCAGCTTTCATGCGCAGCAGGTTGGCGAGAAATCCTC 1920
Qy 1921 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGAGATGTA 1980
Db 1921 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGAGATGTA 1980
Qy 1981 CATGATGCCCTTGTCAAATAATAGCAAAAGGTTGGAGTTGAAAGTCTGAGATTCGATTCAGGA 2040

Db 1981 CATGATGCCCTTGTCAAATAATAGCAAAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2040
Qy 2041 AAAACCTTGGCCACTTTTAAAGAAAGAAAGCGCTACCTTCAGGATATTTGGTCAATA 2097
Db 2041 AAAACCTTGGCCACTTTTAAAGAAAGAAAGCGCTACCTTCAGGATATTTGGTCAATA 2097
RESULT 5
US-09-371-347-24
; Sequence 24, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR FILING DATE: 1998-01-16, 622
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-24
Query Match 99.9%; Score 2095.4; DB 10; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGCAGGCAAAAGGCCATCGCAGAA 60
Db 80 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGCAGGCAAAAGGCCATCGCAGAA 139
Qy 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTATATTAGTAA 120
Db 140 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTATATTAGTAA 199
Qy 121 TCCGATAGTATGACCTTAAACCCGAAACAGCTCCTCTGTTGTTGTTGTTTACCAAG 180
Db 200 TCCGATAGTATGACCTTAAACCCGAAACAGCTCCTCTGTTGTTGTTGTTTACCAAG 259
Qy 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 260 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
Qy 241 CTGCGGTTGATTTCTTTGCTCACCCTGGGTATGGGTTACTCGGTCTCGGTGATTCAGAA 300
Db 320 CTGCGGTTGATTTCTTTGCTCACCCTGGGTATGGGTTACTCGGTCTCGGTGATTCAGAA 379
Qy 301 TACACCTACTTTTCCAAATGGGGGAAGATATTCATAAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTCCAAATGGGGGAAGATATTCATAAACGACTTCAAGAGCTTGGAGCC 439
Qy 361 CGGATTTCTATGACATCGGACATGACATGCTGTAGGTTTAGAACTTTGTTGTTGAG 420
Db 440 CGGATTTCTATGACATCGGACATGACATGCTGTAGGTTTAGAACTTTGTTGTTGAG 499
Qy 421 CCGTGGATGCTGAGCTCTGCGCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGCAAA 480
Db 500 CCGTGGATGCTGAGCTCTGCGCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGCAAA 559
Qy 481 GAGGAGATAGTGGGCACTCCCGGTGCGATCACTGTCATCTTGGAGCAGACCTTGTG 540
Db 560 GAGGAGATAGTGGGCACTCCCGGTGCGATCACTGTCATCTTGGAGCAGACCTTGTG 619
Qy 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 600

Db 620 AAGTCAGAGCTGCTACACATTTGAACTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 679
Qy 601 AGAAGAGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCATGTTGTA 660
Db 680 AGAAGAGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCCCTCACTTACCGTTGCGTACCCCACTCTCAAGCCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCCCTCACTTACCGTTGCGTACCCCACTCTCAAGCCCTCTCTG 799
Qy 721 AATATTCTCTGGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTCGCCAG 780
Db 800 AATATTCTCTGGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTCGCCAG 859
Qy 781 GAGGAAGCAAGATATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 840
Db 860 GAGGAAGCAAGATATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 919
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTCTGTTAGATTCGACATT 900
Db 920 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTCTGTTAGATTCGACATT 979
Qy 901 TCAATACAGACTTTTCTCTATCAGCTCGAGATGCTTCAGCGTGATCTGCCCTTAACAGT 960
Db 980 TCAATACAGACTTTTCTCTATCAGCTCGAGATGCTTCAGCGTGATCTGCCCTTAACAGT 1039
Qy 961 GATTCGAGGTACAAAGCTACTCCTCAAGACTGCAAGTGTGAAGTAAAGAGAGACACTGC 1020
Db 1040 GATTCGAGGTACAAAGCTACTCCTCAAGACTGCAAGTGTGAAGTAAAGAGAGACACTGC 1099
Qy 1021 GTCCCTTTGAAATTAAGGCAGACACAAAGAAAGGAGCTACCTTACCCAGCATATA 1080
Db 1100 GTCCCTTTGAAATTAAGGCAGACACAAAGAAAGGAGCTACCTTACCCAGCATATA 1159
Qy 1081 CTTGCGGAGATGTTCTCTCAGTTTCAATTTTACCTGCTTGAATTCGAGCAATTCCT 1140
Db 1160 CTTGCGGAGATGTTCTCTCAGTTTCAATTTTACCTGCTTGAATTCGAGCAATTCCT 1219
Qy 1141 AAAAGGCAATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGTGAAAGGCGCAGG 1200
Db 1220 AAAAGGCAATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGTGAAAGGCGCAGG 1279
Qy 1201 CTACAGGAGCTGTGAGTAAACAAAGGCGCAGATATAGCCGTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAAGGCGCAGATATAGCCGTTTGTACGAGATGCC 1339
Qy 1261 TGTGCTGCTTGTGAGTCTCTCTCTGCTTTCCTTTCGCGCAGCCACTCAGTCTC 1320
Db 1340 TGTGCTGCTTGTGAGTCTCTCTCTGCTTTCCTTTCGCGCAGCCACTCAGTCTC 1399
Qy 1321 CTGCTCGAACATTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAACATTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
Qy 1381 TTTACCCAGGAAGCTCCTTTGTTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTACCCAGGAAGCTCCTTTGTTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1519
Qy 1441 ACAGAGGTTTTCGGAAGGAGTATGACAGGCTGCTGCGCTTCTGTTGCTTTCAGTT 1500
Db 1520 ACAGAGGTTTTCGGAAGGAGTATGACAGGCTGCTGCGCTTCTGTTGCTTTCAGTT 1579
Qy 1501 CTTACGCCAAAATACATACATCCCATGAAAGACAGCGGGAAGCCCTGCTCTTAAGATA 1560
Db 1580 CTTACGCCAAAATACATACATCCCATGAAAGACAGCGGGAAGCCCTGCTCTTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAAACAAATTTCTTTCATTAACAGATGACCCCTCAATFCCCAATC 1620
Db 1640 TCCATCTCTCTCGAAACAAATTTCTTTCATTAACAGATGACCCCTCAATFCCCAATC 1699
Qy 1621 ATAATGTTGGTCCAGGACCGGATAGCCCGTTTATTTGGTTTCTTCAACATAGAG 1680
Db 1700 ATAATGTTGGTCCAGGACCGGATAGCCCGTTTATTTGGTTTCTTCAACATAGAG 1759

Qy 1681 AAACCTCCAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTTTGGCTGC 1740
Db 1760 AAACCTCCAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTTTGGCTGC 1819
Qy 1741 AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
Db 1820 AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1879
Qy 1801 ATCTTAACTCATTTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
Db 1880 ATCTTAACTCATTTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAGGCC 1939
Qy 1861 CCAGCAAAAGTATGTAACAAGCAACATCCAGCTTCAATGCCCAGCGTGGCGAGATTCCTC 1920
Db 1940 CCAGCAAAAGTATGTAACAAGCAACATCCAGCTTCAATGCCCAGCGTGGCGAGATTCCTC 1999
Qy 1921 CTCAGGAGAAAGCGGCATATTTATGCTGTGGAGATGCAAAAGATATGCCCAGGATGTA 1980
Db 2000 CTCAGGAGAAAGCGGCATATTTATGCTGTGGAGATGCAAAAGATATGCCCAGGATGTA 2059
Qy 1981 CATGATGCCCTTGTGCAAAATTAAGCAAAAGAGGTTGGAGTTGAAAAAATAAGCAATG 2040
Db 2060 CATGATGCCCTTGTGCAAAATTAAGCAAAAGAGGTTGGAGTTGAAAAAATAAGCAATG 2119
Qy 2041 AAAACCCCTGGCCACTTTTAAAGAAAGAAAAACGCTACCTTCAGGATATTTGGTCTATA 2097
Db 2120 AAAACCCCTGGCCACTTTTAAAGAAAGAAAAACGCTACCTTCAGGATATTTGGTCTATA 2176

RESULT 6

US-10-450-763-874
; Sequence 874, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 874
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIMILAR
; LOCATION: (80)..(2173)
; OTHER INFORMATION: 100% homologous to Homo sapiens methionine synthase
; OTHER INFORMATION: reductase, accession number AF025794, Smith-Waterman Score=3624.
US-10-450-763-874

Query Match 99.9%; Score 2095.4; DB 24; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACACAGGAGGACAGGCAAAAGCCATCCGACAA 60
Db 80 ATGAGGAGGTTTCTGTTACTATATGCTACACAGGAGGACAGGCAAAAGCCATCCGACAA 139
Qy 61 GAAATGTGTGAGCAAGCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATG 120
Db 140 GAAATGTGTGAGCAAGCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATG 199
Qy 121 TCCGATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 180

Db 200 TCCGATAGTATGACCTAAAAACGAAACAGCTCTCTCTTGTGTGGTTCTTACCACG 259
Qy 181 GGCCCGGAGACCCACCGGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 260 GGCCCGGAGACCCACCGGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
Qy 241 CTGCCGGTTGATTTCTTTGCTCACCTCGGGTATGGGTCTCGGTGATTCAGAA 300
Db 320 CTGCCGGTTGATTTCTTTGCTCACCTCGGGTATGGGTCTCGGTGATTCAGAA 379
Qy 301 TACACCTACTTTTGCATGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTGCATGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 439
Qy 361 CGGCATTTCTATGACATGGGACATGTCAGATGACTGTGTAGTGTAGAACTTGTGGTTGAG 420
Db 440 CGGCATTTCTATGACATGGGACATGTCAGATGACTGTGTAGTGTAGAACTTGTGGTTGAG 499
Qy 421 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 500 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 559
Qy 481 GAGGAGATAAGTGGCGCATCCCGGTGGCATCACTGCATCTCTTGGAGCAGACCTTGTG 540
Db 560 GAGGAGATAAGTGGCGCATCCCGGTGGCATCACTGCATCTCTTGGAGCAGACCTTGTG 619
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTCGATTCAGGA 600
Db 620 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTCGATTCAGGA 679
Qy 601 AGAAGGATTTCTGAGTTTTCAGCAAAATTCAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 680 AGAAGGATTTCTGAGTTTTCAGCAAAATTCAGTGAACAGCAACCAATCCAAATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCCTGTTCCGTACCCCACTCTCAAGCCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCTCTCACTTACCCTGTTCCGTACCCCACTCTCAAGCCCTCTCTG 799
Qy 721 AATATCTCTGTTTACCCCAAGATATTTACAGTACATCTGCAAGGATCTCTTGGCCAG 780
Db 800 AATATCTCTGTTTACCCCAAGATATTTACAGTACATCTGCAAGGATCTCTTGGCCAG 859
Qy 781 GAGGAAGCCCAAGTATCTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 840
Db 860 GAGGAAGCCCAAGTATCTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 919
Qy 841 GCAGTTCAACTTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGACATT 900
Db 920 GCAGTTCAACTTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGACATT 979
Qy 901 TCAATAACAGACTTTTCTCTATCAGCTGGAGATGCTTACGGTGATCTGGCTTAAACAGT 960
Db 980 TCAATAACAGACTTTTCTCTATCAGCTGGAGATGCTTACGGTGATCTGGCTTAAACAGT 1039
Qy 961 GATTCAGGTTACAAAGCTCTCAAGACTGCAAGTTGAAGATAAAGAGAGACACTGC 1020
Db 1040 GATTCAGGTTACAAAGCTCTCAAGACTGCAAGTTGAAGATAAAGAGAGACACTGC 1099
Qy 1021 GTCCCTTTTGAATAAAGGCGACACAAAGAGAAAGGAGCTACCTTACCCAGCATATA 1080
Db 1100 GTCCCTTTTGAATAAAGGCGACACAAAGAGAAAGGAGCTACCTTACCCAGCATATA 1159
Qy 1081 CCGCGGAGTGTCTCTCAGTTGATTTTACCTGGTCTTGAATTCGGAGCAATTCCT 1140
Db 1160 CCGCGGAGTGTCTCTCAGTTGATTTTACCTGGTCTTGAATTCGGAGCAATTCCT 1219
Qy 1141 AAAAAGGCAATTTTCGGAGCCCTCTGGAATATACAGTGAAGTGTGAAAAGCGCAGG 1200
Db 1220 AAAAAGGCAATTTTCGGAGCCCTCTGGAATATACAGTGAAGTGTGAAAAGCGCAGG 1279
Qy 1201 CTACAGGAGCTGTGCAAGTAAACAAGGGGCGAGCGGATATAGCCGCTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGCAAGTAAACAAGGGGCGAGCGGATATAGCCGCTTTGTACGAGATGCC 1339

Qy 1261 TGTGCTGCTGTTGTGGATCTCCTCCTCGCTTCCCTTCCCTTGGCCAGCCACCACTCAGTCTC 1320
Db 1340 TGTGCTGCTGTTGTGGATCTCCTCCTCGCTTCCCTTCCCTTGGCCAGCCACCACTCAGTCTC 1399
Qy 1321 CTGCTCGAAACATCTTCCCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAAACATCTTCCCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
Qy 1381 TTTTCCACGAGAAAGCTCCATTTTGTCTTCAACATTTGTGTGAAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTTCCACGAGAAAGCTCCATTTTGTCTTCAACATTTGTGTGAAATTTCTGTCTACTGCCACA 1519
Qy 1441 ACAGAGTGTCTCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGTGTTGCTTTCAGTT 1500
Db 1520 ACAGAGTGTCTCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGTGTTGCTTTCAGTT 1579
Qy 1501 CTTTCAAGCAAAACATATCATGCTCCATCAAGACAGCGGAAAGCCCTGGCTTCTTAAGATA 1560
Db 1580 CTTTCAAGCAAAACATATCATGCTCCATCAAGACAGCGGAAAGCCCTGGCTTCTTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAAACAAATTTCTTCACTTACAGATGACCCCTCAATCCCAATC 1620
Db 1640 TCCATCTCTCTCGAAACAAATTTCTTCACTTACAGATGACCCCTCAATCCCAATC 1699
Qy 1621 ATATGCTGGTCCAGGACCGGATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1680
Db 1700 ATATGCTGGTCCAGGACCGGATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1759
Qy 1681 AAACTCCAAGAAACACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
Db 1760 AAACTCCAAGAAACACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
Qy 1741 AGGCATAAGGATAGGATTTATCTATTCAGAAAAGCTCAGACATTTCTTAAAGCATGGG 1800
Db 1820 AGGCATAAGGATAGGATTTATCTATTCAGAAAAGCTCAGACATTTCTTAAAGCATGGG 1879
Qy 1801 ATCTTAACTCATCTAAAGTTTCTCTTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
Db 1880 ATCTTAACTCATCTAAAGTTTCTCTTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1939
Qy 1861 CCAGCAAAAGTATGTACAGAACCAACATCCAGCTTTCATGGCCAGCAGGTGGCAGATCCTC 1920
Db 1940 CCAGCAAAAGTATGTACAGAACCAACATCCAGCTTTCATGGCCAGCAGGTGGCAGATCCTC 1999
Qy 1921 CTCAGAGAAACGGCCATATTTATGTGTGTGAGATGCAAAAGATATGGCCCAAGATGTA 1980
Db 2000 CTCAGAGAAACGGCCATATTTATGTGTGTGAGATGCAAAAGATATGGCCCAAGATGTA 2059
Qy 1981 CATGATGCCCTTGTGCAAAATTAAGCAAGAGTTGGAGTTGAAAACTAGAACCAATG 2040
Db 2060 CATGATGCCCTTGTGCAAAATTAAGCAAGAGTTGGAGTTGAAAACTAGAACCAATG 2119
Qy 2041 AAAACCCCTGGCCACTTTTAAAAAGAAAAACGCTACCTTTCAGGATATTTGGTCATAA 2097
Db 2120 AAAACCCCTGGCCACTTTTAAAAAGAAAAACGCTACCTTTCAGGATATTTGGTCATAA 2176

RESULT 7

US-11-119-096-24
; Sequence 24, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE.
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096

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; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-24

Query Match      99.9%; Score 2095.4; DB 26; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGAGGAGTTCTGTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db      |||
Qy 80 ATGAGGAGTTCTGTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA 139
Db      |||
Qy 61 GAAATGTGTGACAAAGCTGTGTATACATGGATTTCTGCAGATCTTCACTATATTAGTGAA 120
Db      |||
Qy 140 GAAATGTGTGACAAAGCTGTGTATACATGGATTTCTGCAGATCTTCACTATATTAGTGAA 199
Db      |||
Qy 121 TCCGATATAGTATGACTTAAACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 180
Db      |||
Qy 200 TCCGATATAGTATGACTTAAACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 259
Db      |||
Qy 181 GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db      |||
Qy 260 GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
Db      |||
Qy 241 CTGCGGTTGATTTCTTTGCTCCTCCTGCGGTATGGGTTATCTGGGTCTCGGTGATTCAGAA 300
Db      |||
Qy 320 CTGCGGTTGATTTCTTTGCTCCTCCTGCGGTATGGGTTATCTGGGTCTCGGTGATTCAGAA 379
Db      |||
Qy 301 TACACTACTTTTGAATGGGGGGAAGATTAATGATTAACGACTTCAAGAGCTTGGAGCC 360
Db      |||
Qy 380 TACACTACTTTTGAATGGGGGGAAGATTAATGATTAACGACTTCAAGAGCTTGGAGCC 439
Db      |||
Qy 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAAAGAACTTGTGGTTGAG 420
Db      |||
Qy 440 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAAAGAACTTGTGGTTGAG 499
Db      |||
Qy 421 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGGACAA 480
Db      |||
Qy 500 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGGACAA 559
Db      |||
Qy 481 GAGGAGATAAGTGGGCGACTCCCGTGGGATCACTCGATCCCTTGAAGCAGAGACCTTGTG 540
Db      |||
Qy 560 GAGGAGATAAGTGGGCGACTCCCGTGGGATCACTCGATCCCTTGAAGCAGAGACCTTGTG 619
Db      |||
Qy 541 AAGTCAGAGCTCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Db      |||
Qy 620 AAGTCAGAGCTCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
Db      |||
Qy 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGA 660
Db      |||
Qy 680 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGA 739
Db      |||
Qy 661 ATTGAAGACTTTGAGTCTCTACCTTACCGGTTCCGTTACCGGATCCCTCTCAAGCCCTCTCTG 720
Db      |||
Qy 740 ATTGAAGACTTTGAGTCTCTACCTTACCGGTTCCGTTACCGGATCCCTCTCAAGCCCTCTCTG 799
Db      |||
Qy 721 ATATTTCTGTTTACCCCAATATTTACAGGTACATCTGCGAGGATCTCTTGGCCAG 780
Db      |||
Qy 800 AATATTTCTGTTTACCCCAATATTTACAGGTACATCTGCGAGGATCTCTTGGCCAG 859
Db      |||
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Qy 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTTCAAGTGCCCAATTTCAAAG 840
Db      |||
Qy 860 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTTCAAGTGCCCAATTTCAAAG 919
Db      |||
Qy 841 GCAGTTCAACTTACTACGAAATGATGCCATAAAACCACTCTGCTGGTGAATTTGGACATT 900
Db      |||
Qy 920 GCAGTTCAACTTACTACGAAATGATGCCATAAAACCACTCTGCTGGTGAATTTGGACATT 979
Db      |||
Qy 901 TCAAAATACAGACTTTTCTCTATCAGCCTGGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT 960
Db      |||
Qy 980 TCAAAATACAGACTTTTCTCTATCAGCCTGGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT 1039
Db      |||
Qy 961 GATTCTGAGGTACAAAGCCTTACTCAAAAGCTGCGAGCTTGAAGATATAAAGAGAGACACTGC 1020
Db      |||
Qy 1040 GATTCTGAGGTACAAAGCCTTACTCAAAAGCTGCGAGCTTGAAGATATAAAGAGAGACACTGC 1099
Db      |||
Qy 1021 GTCCCTTTTGAATAAAGGCGACACAAAGAGGAGGAGCTTACCTTACCCAGCATATA 1080
Db      |||
Qy 1100 GTCCCTTTTGAATAAAGGCGACACAAAGAGGAGGAGCTTACCTTACCCAGCATATA 1159
Db      |||
Qy 1081 CCTCGGGATGTTCTCTCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db      |||
Qy 1160 CCTCGGGATGTTCTCTCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1219
Db      |||
Qy 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGGAATATACAGTGACAGTGTGAAAAGGCGAGG 1200
Db      |||
Qy 1220 AAAAAGGCAATTTTTCGAGCCCTTGTGGAATATACAGTGACAGTGTGAAAAGGCGAGG 1279
Db      |||
Qy 1201 CTACAGGAGCTGTCAGTAAACAGGGGCGACGATATAGCCGCTTGTACGAGATGCC 1260
Db      |||
Qy 1280 CTACAGGAGCTGTCAGTAAACAGGGGCGACGATATAGCCGCTTGTACGAGATGCC 1339
Db      |||
Qy 1261 TGTGCTGCTTGTGTGGATCTCCTCTCGCTTTCCTTTCGCGAGCCACCACTCAGTCTC 1320
Db      |||
Qy 1340 TGTGCTGCTTGTGTGGATCTCCTCTCGCTTTCCTTTCGCGAGCCACCACTCAGTCTC 1399
Db      |||
Qy 1321 CTGCTCGAACAATCTTCTTAAACTTCAACCCAGACCAATTCGTTGGAAGCTCAAGTTTA 1380
Db      |||
Qy 1400 CTGCTCGAACAATCTTCTTAAACTTCAACCCAGACCAATTCGTTGGAAGCTCAAGTTTA 1459
Db      |||
Qy 1381 TTTTCAACCCAGGAAAGCTCCTTGTCTTCAACATTTGGAATTTCTGCTTACTGCCACA 1440
Db      |||
Qy 1460 TTTTCAACCCAGGAAAGCTCCTTGTCTTCAACATTTGGAATTTCTGCTTACTGCCACA 1519
Db      |||
Qy 1441 ACAGAGGTTTTCGCGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGCTTCAAGTT 1500
Db      |||
Qy 1520 ACAGAGGTTTTCGCGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGCTTCAAGTT 1579
Db      |||
Qy 1501 CTTCAGCCAAACATACATGCTCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Db      |||
Qy 1580 CTTCAGCCAAACATACATGCTCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1639
Db      |||
Qy 1561 TCCATCTCTCTCGAACAAGAAATCTTTCACATTTACAGATGACCCCTCAATCCCCATC 1620
Db      |||
Qy 1640 TCCATCTCTCTCGAACAAGAAATCTTTCACATTTACAGATGACCCCTCAATCCCCATC 1699
Db      |||
Qy 1621 ATAATGTTGGGTTCAGGAAACCGGATAGCCCGCTTATTTAGGTTCTTCAACATAGAGAG 1680
Db      |||
Qy 1700 ATAATGTTGGGTTCAGGAAACCGGATAGCCCGCTTATTTAGGTTCTTCAACATAGAGAG 1759
Db      |||
Qy 1681 AAATCTCAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTGGCTGC 1740
Db      |||
Qy 1760 AAATCTCAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTGGCTGC 1819
Db      |||
Qy 1741 AGGCATAGGATAGGATTTATCTTACAGAAAGGCTCAGACATTTCTTAAAGCATGGG 1800
Db      |||
Qy 1820 AGGCATAGGATAGGATTTATCTTACAGAAAGGCTCAGACATTTCTTAAAGCATGGG 1879
Db      |||
Qy 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
Db      |||
Qy 1880 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1939
Db      |||
Qy 1861 CCAGCAAAGTATGTACAAGACCAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGAAATCTCTC 1920
Db      |||
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Db 1940 CCAGCAAAAGTATGTACAAAGACAACATCCAGCTTCATGSCCAGCAGGTGGCGAGAAATCCTC 1999
Qy 1921 CTCAGGAGAACGGCCATATTTATGTGTGTGGAGATGCAAGAAATATATGGCCAAAGATGTA 1980
Db 2000 CTCAGGAGAAACGGCCATATTTATGTGTGTGGAGATGCAAGAAATATATGGCCAAAGATGTA 2059
Qy 1981 CATGATGCCCTTGTGCAAAATAATAGCAAAAGAGGTTGGAGTTGAAAACTAGAACCAATG 2040
Db 2060 CATGATGCCCTTGTGCAAAATAATAGCAAAAGAGGTTGGAGTTGAAAACTAGAACCAATG 2119
Qy 2041 AAAACCCCTGGCCACTTTAAAAAGAGAAAAACGCTACCTTCAGGATATTTGGTGCATAA 2097
Db 2120 AAAACCCCTGGCCACTTTAAAAAGAGAAAAACGCTACCTTCAGGATATTTGGTGCATAA 2176

RESULT 8
US-09-371-347-41
; Sequence 41, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-41

Query Match 99.8%; Score 2093.8; DB 10; Length 2097;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2095; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 ATGAGGAGGTTCTGTTACTATATGCTACAGAGGACAGGCAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGGTTCTGTTACTATATGCTACAGAGGACAGGCAAGGCCATCGCAGAA 60
Qy 61 GAAATGTGTGAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Qy 121 TCCGATAAGTATGACCTAAAACCGAAACAGCTCCTCTTGTGTGTGGTTTCTACCAAG 180
Db 121 TCCGATAAGTATGACCTAAAACCGAAACAGCTCCTCTTGTGTGTGGTTTCTACCAAG 180
Qy 181 GGCACCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCACCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Qy 241 CTGCGGGTTGATTTCTTTGCTCACCTGGGTATGGGTTACTGGGTCTCGGTGATTTCAGAA 300
Db 241 CTGCGGGTTGATTTCTTTGCTCACCTGGGTATGGGTTACTGGGTCTCGGTGATTTCAGAA 300
Qy 301 TACACCTACTTTTGCAAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCAAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Qy 361 CGGCAATTTCTATGACACTGGACATGCAGATGACTGTAGTTTGAACCTTGTGGTTGAG 420
Db 361 CGGCAATTTCTATGACACTGGACATGCAGATGACTGTAGTTTGAACCTTGTGGTTGAG 420
Qy 421 CCGTGGATTGTGGACTCTGCGCACCCTCAGAAAGCATTTTATGTCAGCAGAGACAA 480
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Db 421 CCGTGGATTGTGGACTCTGSCCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGGACAA 480
Qy 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGCATCCTTTGAGGACAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGCATCCTTTGAGGACAGACCTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTTCAGGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTTCAGGA 600
Qy 601 AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGCAACCAATCCAAATGTTGTA 660
Db 601 AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGCAACCAATCCAAATGTTGTA 660
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTTACCCGTTCCGTCACCCCACTCTCAAGCCCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTTACCCGTTCCGTCACCCCACTCTCAAGCCCTCTG 720
Qy 721 AATATTCCTGTTTACCCCGAGAAATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCGAGAAATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
Qy 781 GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 840
Db 781 GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 840
Qy 841 GCAGTTCAACTTACTAGCAATGATGCCATAAAACCACTCTGCTGGTAGAATTGGACATT 900
Db 841 GCAGTTCAACTTACTAGCAATGATGCCATAAAACCACTCTGCTGGTAGAATTGGACATT 900
Qy 901 TCAATAACAGACTTTTCTATCAGCCTGGAGATGCTTCAAGCTGAGTCTGCGCTTAAACAGT 960
Db 901 TCAATAACAGACTTTTCTATCAGCCTGGAGATGCTTCAAGCTGAGTCTGCGCTTAAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCCCTACTCCAAAGACTGTCAGCTTGAAGATAAAAGAGACACTGC 1020
Db 961 GATTCTGAGGTACAAAGCCCTACTCCAAAGACTGTCAGCTTGAAGATAAAAGAGACACTGC 1020
Qy 1021 GTCTTTTGAATAAAAGGCGACACAAAGAAAGAGAGCTACTTTACCCAGCATATA 1080
Db 1021 GTCTTTTGAATAAAAGGCGACACAAAGAAAGAGAGCTACTTTACCCAGCATATA 1080
Qy 1081 CCTCGGGATGTTCTCTCCAGTTCATTTTACCTGCTGCTTTGAAATCCGAGCAATTCCT 1140
Db 1081 CCTCGGGATGTTCTCTCCAGTTCATTTTACCTGCTGCTTTGAAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCATTTTTCGAGGCCCTTTGTGGACTATATACCAGTGCAGTGTGAAAAGCGCAGG 1200
Db 1141 AAAAAGGCATTTTTCGAGGCCCTTTGTGGACTATATACCAGTGCAGTGTGAAAAGCGCAGG 1200
Qy 1201 CTACAGAGCTGTGCAGTAAACAAAGGGCGAGCCGATTTATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGAGCTGTGCAGTAAACAAAGGGCGAGCCGATTTATAGCCGCTTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTGTTGGATCTCCTCCTCGCTTCCCTTCTTCCAGCCACCACTCAGTCTC 1320
Db 1261 TGTGCTGCTGTTGGATCTCCTCCTCGCTTCCCTTCTTCCAGCCACCACTCAGTCTC 1320
Qy 1321 CTGCTCGAAACATCTTCCCTAAACCTTCAACCCAGACCATATTCGTTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAAACATCTTCCCTAAACCTTCAACCCAGACCATATTCGTTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTCAACCCAGAAAGCTCCATTTTGTCTTCAACATTTGTGGAAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTCAACCCAGAAAGCTCCATTTTGTCTTCAACATTTGTGGAAATTTCTGTCTACTGCCACA 1440
Qy 1441 ACAGAGTTCTGCGGAAAGGAGTATGACAGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
Db 1441 ACAGAGTTCTGCGGAAAGGAGTATGACAGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
Qy 1501 CTTTCAGGCAACATATACATGCCATCCCATGAAGACAGCGGAAAGCCCTGGCTCTCTAAGATA 1560
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Db	1501	CTTCAGCCAAACATACATGCATCCCATGAAGACAGCGGAAAGCCCTGGCTCCTAAGATA	1560
Qy	1561	TCCATCTCTCTCGAACAAACAAATTTCTTTTCCACATTTACCAGATGACCCCTCAATCCCCATC	1620
Db	1561	TCCATCTCTCTCGAACAAACAAATTTCTTTTCCACATTTACCAGATGACCCCTCAATCCCCATC	1620
Qy	1621	ATAATGTGTGGTTCAGGAACCGGCATAGCCCGGTTTATTTGGGTTCTTCAACATAGAGAG	1680
Db	1621	ATAATGTGTGGTTCAGGAACCGGCATAGCCCGGTTTATTTGGGTTCTTCAACATAGAGAG	1680
Qy	1681	AAATCCCAAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTTTGGCTGC	1740
Db	1681	AAATCCCAAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTTTGGCTGC	1740
Qy	1741	AGGCAATAGGATAGGGAATTTCTATTCAAGAAAAGAGCTCAGACATTTCTTTAAGCATGGG	1800
Db	1741	AGGCAATAGGATAGGGAATTTCTATTCAAGAAAAGAGCTCAGACATTTCTTTAAGCATGGG	1800
Qy	1801	ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGGAAGCC	1860
Db	1801	ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTGTGGGAGGAGGAAGCC	1860
Qy	1861	CCAGCAATATGTACAGAGCAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCTC	1920
Db	1861	CCAGCAATATGTACAGAGCAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCTC	1920
Qy	1921	CTCCAGGAGAACGGCCATATTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA	1980
Db	1921	CTCCAGGAGAACGGCCATATTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA	1980
Qy	1981	CATGATGCCCTTGTGCAATTAATAGCAAAAGAGGTGGAGTTGAAAACTAGAAAGCAATG	2040
Db	1981	CATGATGCCCTTGTGCAATTAATAGCAAAAGAGGTGGAGTTGAAAACTAGAAAGCAATG	2040
Qy	2041	AAAAACCTGGCCACTTTAAAGAGAAAAACGCTACCTTCAGGATATTGGTCTATA	2097
Db	2041	AAAAACCTGGCCACTTTAAAGAGAAAAACGCTACCTTCAGGATATTGGTCTATA	2097

RESULT 9
US-11-119-096-41
; Sequence 41; Application US/111119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-41

Query Match 99.8%; Score 2093.8; DB 26; Length 2097;
Best Local Similarity 99.9%; Pred. No. 0;

1081 CCTCGGAGTCTCTCCAGTTCATTTTACCTGGTGTCTTGAAATCCGAGCAATTCCT 1140
Db CCTCGGAGTGTCTCTCCAGTTCATTTTACCTGGTGTCTTGAAATCCGAGCAATTCCT 1140
1141 AAAAAGGCAATTTTGCAGGCCCTTGTGGACTATACCAAGTACAGTGTGAAAGCGCAGG 1200
Db AAAAAGGCAATTTTGCAGGCCCTTGTGGACTATACCAAGTACAGTGTGAAAGCGCAGG 1200
1201 CTACAGAGCTGTGCAGTAACAAAGGGCGCCAGTATATAGCCCTTTGTACGAGATGCC 1260
Db CTACAGAGCTGTGCAGTAACAAAGGGCGCCAGTATATAGCCCTTTGTACGAGATGCC 1260
1261 TGTCCCTGCTTTGTTGGATCTCCTCTGCTTTCCCTTCTGCCAGCACCACTCAGTCTC 1320
Db TGTCCCTGCTTTGTTGGATCTCCTCTGCTTTCCCTTCTGCCAGCACCACTCAGTCTC 1320
1321 CTGCTCGAACATCTTCCTTAACTTCAACCCAGACCATAATTCGTGTGCAAGCTCAAGTTTA 1380
Db TTTCAACCAGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1381 TTTCAACCAGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1441 ACAGAGTTCTGCGGAAGGGAGTATGTACAGCTGGCTGGCTTGTGTTGTTGCTTCAGTT 1500
Db ACAGAGTTCTGCGGAAGGGAGTATGTACAGCTGGCTGGCTTGTGTTGTTGCTTCAGTT 1500
1501 CTTCAGCGAAACATACATGATCCATCCATCCATGAAGAGCGGAAAGCCCTGGCTCCTAAAGATA 1560
Db CTTCAGCGAAACATACATGATCCATCCATGAAGAGCGGAAAGCCCTGGCTCCTAAAGATA 1560
1561 TCCATCTCTCTCGAACAACAAATTTCTTCACTTACAGATGACCCCTCAATCCCCATC 1620
Db TCCATCTCTCTCGAACAACAAATTTCTTCACTTACAGATGACCCCTCAATCCCCATC 1620
1621 ATAATGTGGGTTCAGGAACCGGATAGCCCGCTTTATTTGGTTTCTTCAACATAGAGAG 1680
Db ATAATGTGGGTTCAGGAACCGGATAGCCCGCTTTATTTGGTTTCTTCAACATAGAGAG 1680
1681 AAATCCAAAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTGGCTGC 1740
Db AAATCCAAAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTGGCTGC 1740
1741 AGGATATAGGATAGGATTTCTATTAGAAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
Db AGGATATAGGATAGGATTTCTATTAGAAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
1801 ATCTTAATCTATCTAAAGGTTTCTTCTCAAGAGATGCTCCTGTTGGGGAGGAGAGGCC 1860
Db ATCTTAATCTATCTAAAGGTTTCTTCTCAAGAGATGCTCCTGTTGGGGAGGAGAGGCC 1860
1861 CCAGCAAGTATGTACAGAACAAATCCAGCTTTCATGGCCAGAGGTGGCGAGAAATCCTC 1920
Db CCAGCAAGTATGTACAGAACAAATCCAGCTTTCATGGCCAGAGGTGGCGAGAAATCCTC 1920
1921 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGATATATGGCCAAAGATGTA 1980
Db CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGATATATGGCCAAAGATGTA 1980
1981 CATGATGCCCTTGTGCAATATATAGCAAGAGGTTGGAGTTGAAAACCTAGNAGCAATG 2040
Db CATGATGCCCTTGTGCAATATATAGCAAGAGGTTGGAGTTGAAAACCTAGNAGCAATG 2040
2041 AAAACCTGGCCACTTTAAAAGAGAAAACCGTACCTTCAGGATATTTGGTCATAA 2097
Db AAAACCTGGCCACTTTAAAAGAGAAAACCGTACCTTCAGGATATTTGGTCATAA 2097

RESULT 10
US-10-741-600-692
; Sequence 692, Application US/10741600

; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: C1001499
; CURRENT APPLICATION NUMBER: US/10741.600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 692
; LENGTH: 3256
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-692

Query Match 99.5%; Score 2087; DB 22; Length 3256;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 2075; Conservative 21; Mismatches 1; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACACAGCGGACAGGCAAAAGGCCATCGCAGAA 60
Db 94 ATGAGGAGGTTTCTGTTACTATATGCTACACAGCGGACAGGCAAAAGGCCATCGCAGAA 153
Qy 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Db 154 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGATTAGTGAA 213
Qy 121 TCCGATTAAGTATGACCTTAAAAAACGAAACAGCTCCTCTTGTGTTGTGGTTTTCACACG 180
Db 214 TCCGATTAAGTATGACCTTAAAAAACGAAACAGCTCCTCTTGTGTTGTGGTTTTCACACG 273
Qy 181 GGCACCGGAGACCCACCGGACACAGCCGCAAGTTTCTTAAGGAAATACAGAACCAACA 240
Db 274 GGCACCGGAGACCCACCGGACACAGCCGCAAGTTTCTTAAGGAAATACAGAACCAACA 333
Qy 241 CTGCGGTTGATTTCTTTGCTCACCTCGGTTATGGGTTACTGGGTCTCGGTGATTTCAGAA 300
Db 334 CTGCGGTTGATTTCTTTGCTCACCTCGGTTATGGGTTACTGGGTCTCGGTGATTTCAGAA 393
Qy 301 TACACCTATCTTTTGCATGCGGGAAGATTAATTAACGACTTCAAGAGCTTGGAGCC 360
Db 394 TACACCTATCTTTTGCATGCGGGAAGATTAATTAACGACTTCAAGAGCTTGGAGCC 453
Qy 361 CGGCATTTCTATGACATGGAACATGACATGCTGTAGTGTAGAACTTGTGTTGAG 420
Db 454 CGGCATTTCTATGACATGGAACATGACATGCTGTAGTGTAGAACTTGTGTTGAG 513
Qy 421 CCGTGGATTGCTGACCTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db 514 CCGTGGATTGCTGACCTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 573
Qy 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTCGCATCCCTTGGAGAGAGAGCTTGTG 540
Db 574 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTCGCATCCCTTGGAGAGAGAGCTTGTG 633
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTTCAGGA 600
Db 634 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTTCAGGA 693
Qy 601 AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 694 AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAAATGTTGTA 753
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCGGTTGGTACCCCACTCTCAAGAGCTTCTCTG 720
Db 754 ATTGAAGACTTTGAGTCTCTCACTTACCGGTTGGTACCCCACTCTCAAGAGCTTCTCTG 813
Qy 721 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTGAGGAGTCTTCTGGCCAG 780
Db 814 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTGAGGAGTCTTCTGGCCAG 873
Qy 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTCAATTTCAAAG 840

Db 874 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCATATTTCAAAG 933
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTCTGCTGTAGAAATGGACATT 900
Db 934 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTCTGCTGTAGAAATGGACATT 993
Qy 901 TCAAAATACAGATTTTCTCTCAGCTGAGATGCTTTCAGGCTGATCTGCCCTAACAGT 960
Db 994 TCAAAATACAGATTTTCTCTCAGCTGAGATGCTTTCAGGCTGATCTGCCCTAACAGT 1053
Qy 961 GATTTCTGAGGTACAAAGCCTTACTCCAAAGACTGACGCTTGAAGATAAAAGAGAGAGAGTGC 1020
Db 1054 GATTTCTGAGGTACAAAGCCTTACTCCAAAGACTGACGCTTGAAGATAAAAGAGAGAGAGTGC 1113
Qy 1021 GTCTTTTGAATAAAGGCAGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
Db 1114 GTCTTTTGAATAAAGGCAGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1173
Qy 1081 CCTGCGGATGTTCTCTCCAGTTCAATTTTACCTGCTGCTTGAATTCGAGCAATTCCT 1140
Db 1174 CCTGCGGATGTTCTCTCCAGTTCAATTTTACCTGCTGCTTGAATTCGAGCAATTCCT 1233
Qy 1141 AAAAAGGCAATTTTTCGAGCCTTGTGGACTATACAGTGACAGTGTGAAAGGCGCAGG 1200
Db 1234 AAAAAGGCAATTTTTCGAGCCTTGTGGACTATACAGTGACAGTGTGAAAGGCGCAGG 1293
Qy 1201 CTACAGGAGCTGTGACGTAACAAAGGGCAGCGATTATAGCGCTTTGTACGAGATGCC 1260
Db 1294 CTACAGGAGCTGTGACGTAACAAAGGGCAGCGATTATAGCYGCTTTGTACGAGATGCC 1353
Qy 1261 TGTGCTGCTGTTGGATCTCTCTCGCTTTCCTGCTTTCCTGCTTTCCTGCTTTCCTGCTC 1320
Db 1354 TGTGCTGCTGTTGGATCTCTCTCGCTTTCCTGCTTTCCTGCTTTCCTGCTTTCCTGCTC 1413
Qy 1321 CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGCGAGCTCAAGTTTA 1380
Db 1414 CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGCGAGCTCAAGTTTA 1473
Qy 1381 TTTCACCCAGGAAAGCTCCATTTTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1474 TTTCACCCAGGAAAGCTCCATTTTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1533
Qy 1441 ACAGAGTTTTCGGAAGGAGTATGTACAGCTGGCTGGCTTGTGTTGCTTCAAGT 1500
Db 1534 ACAGAGTTTTCGGAAGGAGTATGTACAGCTGGCTGGCTTGTGTTGCTTCAAGT 1593
Qy 1501 CTTGAGCAAAACATACATGATCCCATGAAGACAGGGGAGCCCTGCTCCTAAGATA 1560
Db 1594 CTTGAGCAAAACATACATGATCCCATGAAGACAGGGGAGCCCTGCTCCTAAGATA 1653
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCATC 1620
Db 1654 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCATC 1713
Qy 1621 ATAATGTTGGTTCAGGAAACCGGCATAGCCCGTTTATTTGGTTCCTTCAACATAGAG 1680
Db 1714 ATAATGTTGGTTCAGGAAACCGGCATAGCCCGTTTATTTGGTTCCTTCAACATAGAG 1773
Qy 1681 AAATCCAGAACACACCCAGATGGAATTTTGGAGCAATGTGTTTGTGTTGGCTGC 1740
Db 1774 AAATCCAGAACACACCCAGATGGAATTTTGGAGCAATGTGTTTGTGTTGGCTGC 1833
Qy 1741 AGGCATAAGGATAGGATATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
Db 1834 AGGCATAAGGATAGGATATCTATTCAAGAAAGAGCTCAGATATTTCTTAAAGCATGGG 1893
Qy 1801 ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTTCTGTTGGGAGAGGAGGCC 1860
Db 1894 ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTTCTGTTGGGAGAGGAGGCC 1953
Qy 1861 CCAGCAAGTATGTACAGACAAATCCAGCTTTCATGGCCAGCAGGTTGGCAGAAATCTCTC 1920

Db 1954 CCAGCAAGTATGTCAAGACAAATCCAGCTTCAATGGCCAGCAGGTGGCRAGAAATCTCTC 2013
Qy 1921 CTCCAGGAGAACGGCCATATTTATGTGTGAGATGCAAGAAATATGGCCAAAGGATGTA 1980
Db 2014 CTCCAGGAGAACGGCCATATTTATGTGTGAGATGCAAGAAATATGGCCAAAGGATGTA 2073
Qy 1981 CATGATGCCCTTGTGCAAAATATAGCAAAAGAGGTTGGAGTTGAAAAAATAGAACGAATG 2040
Db 2074 CATGATGCCCTTGTGCAAAATATAGCAAAAGAGGTTGGAGTTGAAAAAATAGAACGAATG 2133
Qy 2041 AAAACCCCTGGCCACTTTTAAAGAGAAAAACGCTACCTTTCAGGATATTTGGTCATAA 2097
Db 2134 AAAACCCCTGGCCACTTTTAAAGAGAAAAACGCTACCTTTCAGGATATTTGGTCATAA 2190

RESULT 11
US-10-741-600-693
; Sequence 693, Application US/10741600
; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 693
; LENGTH: 3274
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-693

Query Match 99.5%; Score 2087; DB 22; Length 3274;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 2075; Conservative 21; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGGACAGGCAAGGCAATCCAGAA 60
Db 112 ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGGACAGGCAAGGCAATCCAGAA 171
Qy 61 GAAATGTGTGAGCAAGCTGTGTCATGGAATTTTTCGAGATCTTCACTATATTAGTAA 120
Db 172 GAAATGTGTGAGCAAGCTGTGTCATGGAATTTTTCGAGATCTTCACTATATTAGTAA 231
Qy 121 TCCGATAGTATGACCTTAAACCGAAACAGCTCTCTGTTGTTGTTGTTTCTACACG 180
Db 232 TCCGATAGTATGACCTTAAACCGAAACAGCTCTCTGTTGTTGTTGTTTCTACACG 291
Qy 181 GGCAACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Db 292 GGCAACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 351
Qy 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTGGGTCTCGGTGATTCAGAA 300
Db 352 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTGGGTCTCGGTGATTCAGAA 411
Qy 301 TACACCTACTTTTTCGAAATGGGGGAGATATTCATTAACGACTTCAGAGCTTGGAGCC 360
Db 412 TACACCTACTTTTTCGAAATGGGGGAGATATTCATTAACGACTTCAGAGCTTGGAGCC 471
Qy 361 CGGCAATTTCTATGACACTGGACATGACGTGTAGGTGTAGAACTTTGTGTTGAG 420
Db 472 CGGCAATTTCTATGACACTGGACATGACGTGTAGGTGTAGAACTTTGTGTTGAG 531
Qy 421 CCCTGAGATGCTGCACTCTGCGCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGCAA 480
Db 532 CCCTGAGATGCTGCACTCTGCGCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGCAA 591
Qy 481 GAGGAGATAGTGGGCACTCCCGGTGCACTCCTGATCCTTGGAGCAGACCTTGTG 540
Db 592 GAGGAGATAGTGGGCACTCCCGGTGCACTCCTGATCCTTGGAGCAGACCTTGTG 651

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Qy 541 AAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTTCAGGA 600
Db 652 AAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTTCAGGA 711
Qy 601 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
Db 712 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 771
Qy 661 ATTGAAGACTTTGAGTCTCTACTTAACCGTTTCGGTACCCCACTCTCAAGCCCTCTCTG 720
Db 772 ATTGAAGACTTTGAGTCTCTACTTAACCGTTTCGGTACCCCACTCTCAAGCCCTCTCTG 831
Qy 721 AATATTCTCGGTTTACCCCAAGATATTTACAGGTACATCTGCAAGGAGTCTCTGGCCAG 780
Db 832 AATATTCTCGGTTTACCCCAAGATATTTACAGGTACATCTGCAAGGAGTCTCTGGCCAG 891
Qy 781 GAGGAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTCAAGTGCCCAATTTCAAG 840
Db 892 GAGGAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTCAAGTGCCCAATTTCAAG 951
Qy 841 GCAGTTCAACTTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGCAATTTGCAAT 900
Db 952 GCAGTTCAACTTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGCAATTTGCAAT 1011
Qy 901 TCBAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAAACAGT 960
Db 1012 TCBAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAAACAGT 1071
Qy 961 GATTCGAGGTACAAAGCCTACTCCAAAGACTGCAAGCTTGAAGATAAAAGAGAGCACTGC 1020
Db 1072 GATTCGAGGTACAAAGCCTACTCCAAAGACTGCAAGCTTGAAGATAAAAGAGAGCACTGC 1131
Qy 1021 GTCCTTTTGAATAAAGGCGAGACAACAAGAAAGAGGAGTACTCTTACCCCAAGATATA 1080
Db 1132 GTCCTTTTGAATAAAGGCGAGACAACAAGAAAGAGGAGTACTCTTACCCCAAGATATA 1191
Qy 1081 CCTCGGAGTCTCTCTCAGTTCATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1192 CCTCGGAGTCTCTCTCAGTTCATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1251
Qy 1141 AAAAGGCAATTTTGCAGACCTCTGTGACTATACCACTGACAGTGTGAAAAGCGCAGG 1200
Db 1252 AAAAGGCAATTTTGCAGACCTCTGTGACTATACCACTGACAGTGTGAAAAGCGCAGG 1311
Qy 1201 CTACAGGAGCTGTGCAAGTAAACAAGGCGACCGCATATAGCCGCTTTGTACGAGATGCC 1260
Db 1312 CTACAGGAGCTGTGCAAGTAAACAAGGCGACCGCATATAGCYGCTTTGTACGAGATGCC 1371
Qy 1261 TGTGCTGCTGTTGGATCTCTCTCGCTTCCCTTCTGCGCACCACTCAGTCTC 1320
Db 1372 TGTGCTGCTGTTGGATCTCTCTCGCTTCCCTTCTGCGCACCACTCAGTCTC 1431
Qy 1321 CTGCTCGAATCTCTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1432 CTGCTCGAATCTCTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1491
Qy 1381 TTTCACCCAGAAAGCTCCAATTTGTCTTCAACATTTGTGGAATTTCTCTACTGCCACA 1440
Db 1492 TTTCACCCAGAAAGCTCCAATTTGTCTTCAACATTTGTGGAATTTCTCTACTGCCACA 1551
Qy 1441 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGCTTCAGTT 1500
Db 1552 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGCTTCAGTT 1611
Qy 1501 CTTTCAGCAACATACATGCAATCCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Db 1612 CTTTCAGCAACATACATGCAATCCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1671
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTTTCACTTACAGATGACCCCTCAATCCCAATC 1620
Db 1672 TCCATCTCTCTCGAACAACAAATTTCTTTTCACTTACAGATGACCCCTCAATCCCAATC 1731
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Qy 1621 ATAATGGTGGTCCAGGAACCGCATAGCCGCTTTATTGGGTTCTCAACAATAGAGAG 1680
Db 1732 ATAATGGTGGTCCAGGAACCGCATAGCCGCTTTATTGGGTTCTCAACAATAGAGAG 1791
Qy 1681 AAATCTCAAGAACCAACACCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
Db 1792 AAATCTCAAGAACCAACACCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1851
Qy 1741 AGGATAAGGATAGGATTAATCTATTCAAGAAAGAGCTCAGACATTTCTTAAGCATGG 1800
Db 1852 AGGATAAGGATAGGATTAATCTATTCAAGAAAGAGCTCAGAYATTTCTTAAGCATGG 1911
Qy 1801 ATCTTAATCTCATCTAAAGGTTTCTCTCAAGAGATGCTCTGTTGGAGGAGGAAGCC 1860
Db 1912 ATCTTAATCTCATCTAAAGGTTTCTCTCAAGAGATGCTCTGTTGGAGGAGGAAGCC 1971
Qy 1861 CCAGCAAAAGTATGTACAAAGCAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAAATCCTC 1920
Db 1972 CCAGCAAAAGTATGTACAAAGCAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAAATCCTC 2031
Qy 1921 CTCAGAGAAACGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1980
Db 2032 CTCAGAGAAACGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 2091
Qy 1981 CATGATCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAAGAAAGCAATG 2040
Db 2092 CATGATCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAAGAAAGCAATG 2151
Qy 2041 AAAACCTGGCCACTTTTAAAGAAAGAAAAACGCTTACCTTCAGGATATTTGGTCAATA 2097
Db 2152 AAAACCTGGCCACTTTTAAAGAAAGAAAAACGCTTACCTTCAGGATATTTGGTCAATA 2208
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RESULT 12

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US-09-371-347-45
; Sequence 45, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-45
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Query Match 99.2%; Score 2079.4; DB 10; Length 2094;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;
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Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGGACGCAAGGCGCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGGACGCAAGGCGCATCGCAGAA 60
Qy 61 GAAATGTGTGAGCAAGCTGTGTTACATGGAATTTCTGCAGATCTTCACTATATTAGTAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTTACATGGAATTTCTGCAGATCTTCACTATATTAGTAA 120
Qy 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTTGTTGTTTCTACACAG 180
Db 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTTGTTGTTTCTACACAG 180
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181 QY GGCACGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
181 Db GGCACGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
241 QY CTGCGGTTGATTTCTTTCTCTCACTGCGGTATGGTTACTGGGTCTCGGTGATTCAGAA 300
241 Db CTGCGGTTGATTTCTTTCTCTCACTGCGGTATGGTTACTGGGTCTCGGTGATTCAGAA 300
301 QY TACACTACTTTTGCATGGGGGAGATTAATTTGATAAACAAGCTTCAAGAGCTTGGAGCC 360
301 Db TACACTACTTTTGCATGGGGGAGATTAATTTGATAAACAAGCTTCAAGAGCTTGGAGCC 360
361 QY CGGCATTTCTATGACACTGGACATGACAGATGATCTGTAGGTTTGAAGCTTGTGTTGAG 420
361 Db CGGCATTTCTATGACACTGGACATGACAGATGATCTGTAGGTTTGAAGCTTGTGTTGAG 420
421 QY CCGTGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGACTTTTAGCTCAAGCAGAGACAA 480
421 Db CCGTGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGACTTTTAGCTCAAGCAGAGACAA 480
481 QY GAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAATCCTTGAGGACAGACCTTGTG 540
481 Db GAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAATCCTTGAGGACAGACCTTGTG 540
541 QY AAGTCAGAGCTCTACACATTTGAATTTCAAGTCTGAGCTTCTGAGATTCGATGATTCAGA 600
541 Db AAGTCAGAGCTCTACACATTTGAATTTCAAGTCTGAGCTTCTGAGATTCGATGATTCAGA 600
601 QY AGAAAGGATTTGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATCCAAATGTTGA 660
601 Db AGAAAGGATTTGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATCCAAATGTTGA 660
661 QY ATTGAAGACTTTGAGTCTCACTTACCCTGCTGGTACCCCACTCTCAAGCCCTCTCTG 720
661 Db ATTGAAGACTTTGAGTCTCACTTACCCTGCTGGTACCCCACTCTCAAGCCCTCTCTG 720
721 QY AATATTCCTGGTTTACCCCAAGATTTTACAGGTACATCTGCGAGAGTCTCTGGCCAG 780
721 Db AATATTCCTGGTTTACCCCAAGATTTTACAGGTACATCTGCGAGAGTCTCTGGCCAG 780
781 QY GAGGAAAGCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGGCCAAATTTCAAG 840
781 Db GAGGAAAGCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGGCCAAATTTCAAG 840
841 QY CGAGTTTCAACTTACTACGAATGATGCCATAAAGCACTCTGCTGGTAGAATTTGACATTT 900
841 Db CGAGTTTCAACTTACTACGAATGATGCCATAAAGCACTCTGCTGGTAGAATTTGACATTT 900
901 QY TCAATACAGACTTTTCTATCAGCTGGAGATGCTTTCAGGCTGATCTGCGCTAACAGT 960
901 Db TCAATACAGACTTTTCTATCAGCTGGAGATGCTTTCAGGCTGATCTGCGCTAACAGT 960
961 QY GATTCGAGGTACAAAGCTTACTCCAAAGACTGAGCTTGAAGATAAAGAGAGCACTGC 1020
961 Db GATTCGAGGTACAAAGCTTACTCCAAAGACTGAGCTTGAAGATAAAGAGAGCACTGC 1020
1021 QY GTCTCTTTGAAATAAAGGCAGACACAAAGAAAGAGGAGTACCTTACCCCGACATATA 1080
1021 Db GTCTCTTTGAAATAAAGGCAGACACAAAGAAAGAGGAGTACCTTACCCCGACATATA 1080
1081 QY CTGCGGAGATTTCTCTCAGTTCAATTTTACCTGGTGTCTTGAATTCGAGCAATTCCT 1140
1081 Db CTGCGGAGATTTCTCTCAGTTCAATTTTACCTGGTGTCTTGAATTCGAGCAATTCCT 1140
1141 QY AAAAGGCAATTTTGGAGCCCTTGTGACTATACAGTACAGTGCCTGAAAAGGCGAGG 1200
1141 Db AAAAGGCAATTTTGGAGCCCTTGTGACTATACAGTACAGTGCCTGAAAAGGCGAGG 1200
1201 QY CTACAGGAGCTGTGAGTAAACAAGGGGAGCGGATTAAGCGCTTGTAGAGATGCC 1260
1201 Db CTACAGGAGCTGTGAGTAAACAAGGGGAGCGGATTAAGCGCTTGTAGAGATGCC 1260
1261 QY TGTGCTGCTGTTGGATCTCTCTCTGCTTCCCTTCTTGTGCGAGCCACCACTCAGTCTC 1320

1261 Db TGTGCTGCTGTTGGATCTCTCTCTGCTTCCCTTCCAGCCACCACTCAGTCTC 1320
1321 QY CTGCTCGAAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
1321 Db CTGCTCGAAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
1381 QY TTTTCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1381 Db TTTTCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1441 QY ACAGAGTTCTCGCGAAGGGAGTATGTACAGCTGGCTGGCTTGTGTTGCTTCACTT 1500
1441 Db ACAGAGTTCTCGCGAAGGGAGTATGTACAGCTGGCTGGCTTGTGTTGCTTCACTT 1500
1501 QY CTTTCCAGCAACATACATGTCATCCCATCAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
1501 Db CTTTCCAGCAACATACATGTCATCCCATCAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
1561 QY TCCATCTCTCTCGAAACAACTTCTTCCACTTACCAGATGACCCCTCAATCCCATC 1620
1561 Db TCCATCTCTCTCGAAACAACTTCTTCCACTTACCAGATGACCCCTCAATCCCATC 1620
1621 QY ATATGTTGGTCCAGGAACCGGCATAGCCCGTTTATTGGTTCCTACACATAGAG 1680
1621 Db ATATGTTGGTCCAGGAACCGGCATAGCCCGTTTATTGGTTCCTACACATAGAG 1680
1681 QY AAATCCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
1681 Db AAATCCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
1741 QY AGGCATAAGATAGGATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
1741 Db AGGCATAAGATAGGATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
1801 QY ATCTTAATCTATTAAGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
1801 Db ATCTTAATCTATTAAGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
1861 QY CCAGCAAAAGTATGTACAGACAAACATCCAGCTTCTATGGCCAGAGCTGGCAGAACTCTC 1920
1861 Db CCAGCAAAAGTATGTACAGACAAACATCCAGCTTCTATGGCCAGAGCTGGCAGAACTCTC 1920
1921 QY CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGATATATGCCCAAGGATGTA 1980
1921 Db CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGATATATGCCCAAGGATGTA 1980
1981 QY CATGATGCCCTTGTGCAATTAATTAAGCAAGAGGTTGGAGTTGAAAACTAGAAGCAATG 2040
1981 Db CATGATGCCCTTGTGCAATTAATTAAGCAAGAGGTTGGAGTTGAAAACTAGAAGCAATG 2040
2041 QY AAAACCCCTGGCCACTTTTAAAGAAAGAAACGCTACCTTTCAGGATATTTTGGTCATAA 2097
2041 Db AAAACCCCTGGCCACTTTTAAAGAAAGAAACGCTACCTTTCAGGATATTTTGGTCATAA 2097

RESULT 13

US-11-119-096-45

; Sequence 45, Application US/111119096

; Publication No. US20050191701A1

; GENERAL INFORMATION:

; APPLICANT: Gravel, Roy A,

; APPLICANT: Rozen, Rima

; APPLICANT: Leclerc, Daniel

; APPLICANT: Wilson, Aaron

; APPLICANT: Rosenblatt, David

; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:

; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE

; FILE REFERENCE: 50004/003005

; CURRENT APPLICATION NUMBER: US/11/119,096

; CURRENT FILING DATE: 2005-04-29

; PRIOR APPLICATION NUMBER: 09/487,841

; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-45

Query Match 99.2%; Score 2079.4; DB 26; Length 2094;

Best Local Similarity 99.8%; Pred. No. 0;

Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;

Qy	1	ATGAGGAGTTCTCTGTTACTATATGCTACACAGGAGGACAGGCAAAAGGCCATCGCAGAA	60
Db	1	ATGAGGAGTTCTCTGTTACTATATGCTACACAGGAGGACAGGCAAAAGGCCATCGCAGAA	60
Qy	61	GAATGTGTGAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTTCACTATTAGTGAA	120
Db	61	GAATGTGTGAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTTCACTATTAGTGAA	120
Qy	121	TCCGATAAGTATGACCTTAAACCGAACAACAGCTCTCTTGTGTTGTGGTTTCTACACG	180
Db	121	TCCGATAAGTATGACCTTAAACCGAACAACAGCTCTCTTGTGTTGTGGTTTCTACACG	180
Qy	181	GGCACCGGAGACCCACCGACACACCGCGCAAGTTTGTAGGAATACAGAACCAACA	240
Db	181	GGCACCGGAGACCCACCGACACACCGCGCAAGTTTGTAGGAATACAGAACCAACA	240
Qy	241	CTGCCGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTGGGTCTCGGTGATTTCAGAA	300
Db	241	CTGCCGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTGGGTCTCGGTGATTTCAGAA	300
Qy	301	TACACCTACTTTTGCATGGGGGGAAGATAATTTGATAAACGACTTCAAGAGCTTGGAGCC	360
Db	301	TACACCTACTTTTGCATGGGGGGAAGATAATTTGATAAACGACTTCAAGAGCTTGGAGCC	360
Qy	361	CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTTTGAACCTTGTGGTTGAG	420
Db	361	CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTTTGAACCTTGTGGTTGAG	420
Qy	421	CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTAGGTCAAGCAGAGGACAA	480
Db	421	CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTAGGTCAAGCAGAGGACAA	480
Qy	481	GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGTCATCCTTGAGGACAGACCTTGTG	540
Db	481	GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGTCATCCTTGAGGACAGACCTTGTG	540
Qy	541	AAGTCAGAGCTGTACACATTGAACTCAAGTCGAGCTTCTGAGATTCGATGATTTCAGGA	600
Db	541	AAGTCAGAGCTGTACACATTGAACTCAAGTCGAGCTTCTGAGATTCGATGATTTCAGGA	600
Qy	601	AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAAACAGCAACCAATCCAATGTTGA	660
Db	601	AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAAACAGCAACCAATCCAATGTTGA	660
Qy	661	ATTGAAGACTTTGAGTCTCTCACTTACCCTGGTACCCCACTCTCAAGAGCTCTCTG	720
Db	661	ATTGAAGACTTTGAGTCTCTCACTTACCCTGGTACCCCACTCTCAAGAGCTCTCTG	720
Qy	721	AATATTCCTGTTTACCCCAAGATATTTACAGTACATCTGCAGAGTCTCTTGGCCAG	780
Db	721	AATATTCCTGTTTACCCCAAGATATTTACAGTACATCTGCAGAGTCTCTTGGCCAG	780
Qy	781	GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG	840
Db	781	GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG	840

Db	781	GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG	840
Qy	841	GCAGTTCAACTTACTACGAATGATGCCATAAAAACCACTCTGCTGGTAGAATTTGGACATTT	900
Db	841	GCAGTTCAACTTACTACGAATGATGCCATAAAAACCACTCTGCTGGTAGAATTTGGACATTT	900
Qy	901	TCAAATAACAGACTTTTCTCTATCAGCCTGGAGATCCCTTTCAGCGTGTATCTGCCCTAACAGT	960
Db	901	TCAAATAACAGACTTTTCTCTATCAGCCTGGAGATCCCTTTCAGCGTGTATCTGCCCTAACAGT	960
Qy	961	GATTCTGAGGTACAAAGCCTACTCCAAAGACTGACAGCTTGAAGATAAAAGAGAGACACTGC	1020
Db	961	GATTCTGAGGTACAAAGCCTACTCCAAAGACTGACAGCTTGAAGATAAAAGAGAGACACTGC	1020
Qy	1021	GTCCCTTTTGAATAAAGGACAGACAAAGAAAGAGGAGCTACTTTACCCACGATATA	1080
Db	1021	GTCCCTTTTGAATAAAGGACAGACAAAGAAAGAGGAGCTACTTTACCCACGATATA	1080
Qy	1081	CCTCGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140
Db	1081	CCTCGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140
Qy	1141	AAAAAGCAATTTTTCGAGCCCTTGTGACTATACCACTGACAGTGTGAAAGCGCAGG	1200
Db	1141	AAAAAGCAATTTTTCGAGCCCTTGTGACTATACCACTGACAGTGTGAAAGCGCAGG	1200
Qy	1201	CTACAGAGCTGTGCAGTAAACAAAGGGCGACCAATATAGCCGCTTGTACGAGATGCC	1260
Db	1201	CTACAGAGCTGTGCAGTAAACAAAGGGCGACCAATATAGCCGCTTGTACGAGATGCC	1260
Qy	1261	TGTCCCTGCTTGTGGATCTCTCTCGCTTCTTCCCTTCTTCCAGCCACCACTCAGTCTC	1320
Db	1261	TGTCCCTGCTTGTGGATCTCTCTCGCTTCTTCCCTTCTTCCAGCCACCACTCAGTCTC	1320
Qy	1321	CTGCTCGAAACATCTTCTTAACTTTCAACCCAGACCAATATTCGTTGCAAGCTCAAGTTTA	1380
Db	1321	CTGCTCGAAACATCTTCTTAACTTTCAACCCAGACCAATATTCGTTGCAAGCTCAAGTTTA	1380
Qy	1381	TTTCAACCAGAAAGCTCCATTTTGTCTTCAACATTTGTTGGAATTTCTGTCTACTGCCACA	1440
Db	1381	TTTCAACCAGAAAGCTCCATTTTGTCTTCAACATTTGTTGGAATTTCTGTCTACTGCCACA	1440
Qy	1441	ACAGAGTTCTCGCGGAAGGAGTATGTACAGCTGGCTGGCTTGTGGTTGCTTTCAGTT	1500
Db	1441	ACAGAGTTCTCGCGGAAGGAGTATGTACAGCTGGCTGGCTTGTGGTTGCTTTCAGTT	1500
Qy	1501	CTTCAGCCAAACATATCATGCAATCCCATGAAGACAGCGGGAAGCCCTTGGCTCTTAAGATA	1560
Db	1501	CTTCAGCCAAACATATCATGCAATCCCATGAAGACAGCGGGAAGCCCTTGGCTCTTAAGATA	1560
Qy	1561	TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC	1620
Db	1561	TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC	1620
Qy	1621	ATAATGTTGGTTCAGGAACCGGCATAGCCCGTATTATTTGGGTTCTTACACATAGAGAG	1680
Db	1621	ATAATGTTGGTTCAGGAACCGGCATAGCCCGTATTATTTGGGTTCTTACACATAGAGAG	1680
Qy	1681	AAATCTCAAGAAACACACCCAGATGGAAATTTTGGAGCAATGTGGTTGTTTTGGCTGC	1740
Db	1681	AAATCTCAAGAAACACACCCAGATGGAAATTTTGGAGCAATGTG--GTTTTTGGCTGC	1737
Qy	1741	AGGATTAAGGATAGGATTTATCTATTGAAAGAGCTCAGACATTTCTTAAAGCATGGG	1800
Db	1738	AGGATTAAGGATAGGATTTATCTATTGAAAGAGCTCAGACATTTCTTAAAGCATGGG	1797
Qy	1801	ATCTTAATCTCATCTAAAGTTTTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGAAGCC	1860
Db	1798	ATCTTAATCTCATCTAAAGTTTTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGAAGCC	1857
Qy	1861	CCAGCAAGATGTATCAAGACAAACATCCAGTTTCATGGCCAGCAGGTGGCAGATCTC	1920
Db	1858	CCAGCAAGATGTATCAAGACAAACATCCAGTTTCATGGCCAGCAGGTGGCAGATCTC	1917

1921	CTCAGGAGAA	CGGCCATATTTATGTGTGGAGATCAAAAGAAATATGGCCAAGGATGTA	1980
Qy			
1918	CTCAGGAGAA	CGGCCATATTTATGTGTGTGGAGATCAAAAGAAATATGGCCAAGGATGTA	1977
Db			
1981	CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAGTTGAAAAACTAGAAAGCAATG	2040	
Qy			
1978	CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAGTTGAAAAACTAGAAAGCAATG	2037	
Db			
2041	AAAACCTGGCCACTTTAAAGAGAAAAACGCTACCTTCAGATATTTGGTCATAA	2097	
Qy			
2038	AAAACCTGGCCACTTTAAAGAGAAAAACGCTACCTTCAGATATTTGGTCATAA	2094	
Db			

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RESULT 14
US-09-371-347-47
; Sequence 47, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371.347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: JFastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-47

```

Query Match	99.1%; Score 2077.4; DB 10; Length 2093;	
Best Local Similarity	99.8%; Pred. No. 0;	
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;		
Qy 1	ATGAGGAGGTTTCGTGTTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 60	
Db 1	ATGAGGAGGTTTCGTGTTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 60	
Qy 61	GAATGTTGTGACGAAGCTGTGGTACATGGATTTTCTGCAGATCTTCTACTATATATTAGTAA 120	
Db 61	GAATGTTGTGACGAAGCTGTGGTACATGGATTTTCTGCAGATCTTCTACTGTATTAGTAA 120	
Qy 121	TCCGATTAAGTATGACCTAAAAACCGAAACAGCTCCTCTGTGTGTTGTGGTTTCTACCAAC 180	
Db 121	TCCGATTAAGTATGACCTAAAAACCGAAACAGCTCCTCTGTGTGTTGTGGTTTCTACCAAC 180	
Qy 181	GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTCTTAAGGAATATACAGAACCAAAACA 240	
Db 181	GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTCTTAAGGAATATACAGAACCAAAACA 240	
Qy 241	CTGCGGTTGATTTCTTTTGCTCACCTCCGGTATGGGTTACTGGGTCTCGGTGATTAGAA 300	
Db 241	CTGCGGTTGATTTCTTTTGCTCACCTCCGGTATGGGTTACTGGGTCTCGGTGATTAGAA 300	
Qy 301	TACACCTACTTTTGCATGGGGGAAGATTAATTGATAAACGACTTCAAGAGCTTGGAGCC 360	
Db 301	TACACCTACTTTTGCATGGGGGAAGATTAATTGATAAACGACTTCAAGAGCTTGGAGCC 360	
Qy 361	CGGCATTTTCTATGACACTGGACATGACAGATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420	
Db 361	CGGCATTTTCTATGACACTGGACATGACAGATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420	
Qy 421	CCGTGGATTTGCTGGACTCTCGCCAGCCCTCAGAAAGCAITTTTAGTCAACGACAGAGCAA 480	
Db 421	CCGTGGATTTGCTGGACTCTCGCCAGCCCTCAGAAAGCAITTTTAGTCAACGACAGAGCAA 480	

Qy	481	GAGGAGATAAAGTGGCGCACTCCCGTGGGCATCACTGCAATCCCTTGAGGACAGACCTTGTC	540
Db	481	GAGGAGATAAAGTGGCGCACTCCCGTGGGCATCACTGCAATCCCTTGAGGACAGACCTTGTC	540
Qy	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGAGATTCAGGA	600
Db	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGAGATTCAGGA	600
Qy	601	AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGCAACCAATCCAATGTTGTA	660
Db	601	AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGCAACCAATCCAATGTTGTA	660
Qy	661	ATTGAAGACTTTGAGTCTCACTTACCGTTCCGTTACCCCACTCTCAAGGCTCTCTG	720
Db	661	ATTGAAGACTTTGAGTCTCACTTACCGTTCCGTTACCCCACTCTCAAGGCTCTCTG	720
Qy	721	AATATTCTCTGGTTTTACCCCCAGAAATATTTACAGGTACATCTCGCAGGAGTCTCTTTGGCCAG	780
Db	721	AATATTCTCTGGTTTTACCCCCAGAAATATTTACAGGTACATCTCGCAGGAGTCTCTTTGGCCAG	780
Qy	781	GAGGAAAGCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGGCCAAATTTCAAAG	840
Db	781	GAGGAAAGCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGGCCAAATTTCAAAG	840
Qy	841	GCAGTTCAACTTACTAGGAATGATGCATAAAACCACTCTGCTGGTAGAATTTGGCAATT	900
Db	841	GCAGTTCAACTTACTAGGAATGATGCATAAAACCACTCTGCTGGTAGAATTTGGCAATT	900
Qy	901	TCAAAATACAGACTTTTCTTATCAGCTGGAGATGCTTTCAGCGTGTATCTGCCCTTAACAGT	960
Db	901	TCAAAATACAGACTTTTCTTATCAGCTGGAGATGCTTTCAGCGTGTATCTGCCCTTAACAGT	960
Qy	961	GATTTCTGAGGTACAAAGCCCTACTCCAAGACTGCAGCTTGAAAGATAAAAGAGAGCACTGC	1020
Db	961	GATTTCTGAGGTACAAAGCCCTACTCCAAGACTGCAGCTTGAAAGATAAAAGAGAGCACTGC	1020
Qy	1021	GTCTCTTTGAAATAAAGCAGACACAAAGAAAGGAGCTACCTTACCCGAGCATATA	1080
Db	1021	GTCTCTTTGAAATAAAGCAGACACAAAGAAAGGAGCTACCTTACCCGAGCATATA	1080
Qy	1081	CTTGCGGGATGTTCTCTCCAGTTTCATTTTTACCTGGTGTCTTGAAATCCGAGCAATTCCT	1140
Db	1081	CTTGCGGGATGTTCTCTCCAGTTTCATTTTTACCTGGTGTCTTGAAATCCGAGCAATTCCT	1140
Qy	1141	AAAAAGCATTTTTTGGAGCCCTTGTGGACTATACAGTGAAGTGTGAAAGCGCAGG	1200
Db	1141	AAAAAGCATTTTTTGGAGCCCTTGTGGACTATACAGTGAAGTGTGAAAGCGCAGG	1200
Qy	1201	CTACAGAGCTGTGCAGTAAACAAGGGCAGCCGATATAGCCGCTTTGTACAGAGTGCC	1260
Db	1201	CTACAGAGCTGTGCAGTAAACAAGGGCAGCCGATATAGCCGCTTTGTACAGAGTGCC	1260
Qy	1261	TGTGCTCTGTTGTGGATCTCTCTCCCTTTCCCTTTCTTGCCAGCCACCACTCAGTCTC	1320
Db	1261	TGTGCTCTGTTGTGGATCTCTCTCCCTTTCCCTTTCTTGCCAGCCACCACTCAGTCTC	1320
Qy	1321	CTGCTCGAAACATCTTCTCTAACTTTCAAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380
Db	1321	CTGCTCGAAACATCTTCTCTAACTTTCAAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380
Qy	1381	TTTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA	1440
Db	1381	TTTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA	1440
Qy	1441	ACAGAGTTCTCGCGGAAGGAGTATGTAAGGCTGGCTGGCCCTTTGTTGGTTGCTTCAGTT	1500
Db	1441	ACAGAGTTCTCGCGGAAGGAGTATGTAAGGCTGGCTGGCCCTTTGTTGGTTGCTTCAGTT	1500
Qy	1501	CTTCAGGCCAAACATATATGATCCCATGAAAGCAGCGGGAAAGCCCTGGCTCCTAAGATA	1560
Db	1501	CTTCAGGCCAAACATATATGATCCCATGAAAGCAGCGGGAAAGCCCTGGCTCCTAAGATA	1560

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Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
Qy 1621 ATAATGTGGTCCAGGAACCGGCATGCCCGTTTATTTGGTTTCTTCAACATAGAG 1680
Db 1621 ATAATGTGGTCCAGGAACCGGCATGCCCGTTTATTTGGTTTCTTCAACAT- - -AG 1676
Qy 1681 AATCTCCAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTTTGGCTGC 1740
Db 1677 AATCTCCAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTTTGGCTGC 1736
Qy 1741 AGGATAAGGATAGGATATCTATTAGAAAGAGCTCAGACATTTCTTTAAGCATGG 1800
Db 1737 AGGATAAGGATAGGATATCTATTAGAAAGAGCTCAGACATTTCTTTAAGCATGG 1796
Qy 1801 ATCTTAATCTATAAAGTTTCTCTCAAGAGATGCTCTCTTTGGGAGGAGGAAGCC 1860
Db 1797 ATCTTAATCTATAAAGTTTCTCTCAAGAGATGCTCTCTTTGGGAGGAGGAAGCC 1856
Qy 1861 CCAGCAAGATATGACAGAACACATCAGCTTCAATGGCCAGAGGTGGCAGATCTC 1920
Db 1857 CCAGCAAGATATGACAGAACACATCAGCTTCAATGGCCAGAGGTGGCAGATCTC 1916
Qy 1921 CTCAGGAGAACGGCCATATTTATGTGTGTGAGATGCAAGAAATATGGCCAAAGATGTA 1980
Db 1917 CTCAGGAGAACGGCCATATTTATGTGTGTGAGATGCAAGAAATATGGCCAAAGATGTA 1976
Qy 1981 CATGATGCCCTTGTGCAATTAATAAGCAAGAGGTGGAGTTGAAAACTAGAAGCAATG 2040
Db 1977 CATGATGCCCTTGTGCAATTAATAAGCAAGAGGTGGAGTTGAAAACTAGAAGCAATG 2036
Qy 2041 AAAACCTGGCCACTTTAAAAGAGAAAAAGCTACCTTCAGGATATTTGGTCATAA 2097
Db 2037 AAAACCTGGCCACTTTAAAAGAGAAAAAGCGCTACCTTCAGGATATTTGGTCATAA 2093

RESULT 15
US-11-119-096-47
; Sequence 47, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima,
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-47

Query Match 99.1%; Score 2077.4; DB 26; Length 2093;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;
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Qy 1 ATGAGGAGGTTTCTGTATTATATGCTACAGCAGGACAGGAAAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTATTATATGCTACAGCAGGACAGGAAAAGGCCATCGCAGAA 60
Qy 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Qy 121 TCCGATTAAGTATGACCTTAAAAACCGAAACAGCTCTCTTGTGTGTGGTTTCTTACCACG 180
Db 121 TCCGATTAAGTATGACCTTAAAAACCGAAACAGCTCTCTTGTGTGTGGTTTCTTACCACG 180
Qy 181 GGCACCCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Db 181 GGCACCCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Qy 241 CTGCCGGTTGATTTTCTTGTCTACCTCGGGTATGGGTTACTGGGTCTCGGTGATTCAGAA 300
Db 241 CTGCCGGTTGATTTTCTTGTCTACCTCGGGTATGGGTTACTGGGTCTCGGTGATTCAGAA 300
Qy 301 TACACCTACTTTTGCATATGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTTGGAGCC 360
Db 301 TACACCTACTTTTGCATATGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTTGGAGCC 360
Qy 361 CGGCATTTCTATGACACTTGACATGCAGATGACTGTGTAGGTTTGTAGAACTTTGTGGTTGAG 420
Db 361 CGGCATTTCTATGACACTTGACATGCAGATGACTGTGTAGGTTTGTAGAACTTTGTGGTTGAG 420
Qy 421 CCGTGGATGTGTGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db 421 CCGTGGATGTGTGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Qy 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGCATCCTTGAGGACAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGCATCCTTGAGGACAGACCTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGGCTTCTGAGATTCGATGATTCAGGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGGCTTCTGAGATTCGATGATTCAGGA 600
Qy 601 AGAAAGGATTCAGAGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 601 AGAAAGGATTCAGAGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 660
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTCCGTAACCCCACTCTCAAGCCCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTCCGTAACCCCACTCTCAAGCCCTCTCTG 720
Qy 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGAGTCTCTTGGCCAG 780
Qy 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTCCCAATTTCAAAG 840
Db 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTCCCAATTTCAAAG 840
Qy 841 GCAGTTCAACTTACTAGCAATGATGCAATGATGCAATGATGCAATGATGCAATGATGCAAT 900
Db 841 GCAGTTCAACTTACTAGCAATGATGCAATGATGCAATGATGCAATGATGCAATGATGCAAT 900
Qy 901 TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
Db 901 TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCTTACTCCAAAGCTGAGCTTGAAGATAAAGAGAGACCTGC 1020
Db 961 GATTCTGAGGTACAAAGCTTACTCCAAAGCTGAGCTTGAAGATAAAGAGAGACCTGC 1020
Qy 1021 GTCTTTTGAATAAAGGAGAGACCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1080
Db 1021 GTCTTTTGAATAAAGGAGAGAGACCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1080
Qy 1081 CCTCGGGATGTTCTCTCCAGTTTATTTTACCTGGTGTCTTTGAAATCCGAGCAATTCCT 1140
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Wed Nov 9 14:54:08 2005

Db	1081	CTCGGGATGTTCTCTCCAGTTCATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140
Qy	1141	AAAAGGCATTTTTCGAGGCCCTTGTGGAATATACAGTGCACAGTGTCTGAAAAGCGCAGG	1200
Db	1141	AAAAGGCATTTTTCGAGGCCCTTGTGGAATATACAGTGCACAGTGTCTGAAAAGCGCAGG	1200
Qy	1201	CTACAGAGCTGTGCAGTAAACAAGGGGACGCCGATATATAGCGCTTTGTACAGATGCC	1260
Db	1201	CTACAGAGCTGTGCAGTAAACAAGGGGACGCCGATATATAGCGCTTTGTACAGATGCC	1260
Qy	1261	TGTGCCTGCTTGTGGAGTCTCCTCTCGCTTTCCCTTCTTGGCCACGACCACCTCAGTCTC	1320
Db	1261	TGTGCCTGCTTGTGGAGTCTCCTCTCGCTTTCCCTTCTTGGCCACGACCACCTCAGTCTC	1320
Qy	1321	CTGCTCGAACAATCTTCTCTAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA	1380
Db	1321	CTGCTCGAACAATCTTCTCTAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA	1380
Qy	1381	TTTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTCGTGGAATTTCTGTCTACTGCCACA	1440
Db	1381	TTTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTCGTGGAATTTCTGTCTACTGCCACA	1440
Qy	1441	ACAGAGTTCTGCGAAAGGAGTATGACAGGCTGGCTGGCCCTGTGTGGTTGCTCAGTT	1500
Db	1441	ACAGAGTTCTGCGAAAGGAGTATGACAGGCTGGCTGGCCCTGTGTGGTTGCTCAGTT	1500
Qy	1501	CTTCAGCCAAACATACATGATCCCATGAGACAGCGGGAAGCCCTGGCTCCCTAAGATA	1560
Db	1501	CTTCAGCCAAACATACATGATCCCATGAGACAGCGGGAAGCCCTGGCTCCCTAAGATA	1560
Qy	1561	TCCATCTCTCCTCGAAACAACAAATTCCTTCCACTTACAGATGACCCCTCAATCCCATC	1620
Db	1561	TCCATCTCTCCTCGAAACAACAAATTCCTTCCACTTACAGATGACCCCTCAATCCCATC	1620
Qy	1621	ATAATGTGGTTCAGGAAACCGGCATAGCCCGTTATTTGGTTTCTTACAACTAGAGAG	1680
Db	1621	ATAATGTGGTTCAGGAAACCGGCATAGCCCGTTATTTGGTTTCTTACAACTAGAGAG	1680
Qy	1681	AACTCTCAAGAAACAACCCAGATGGAAATTTTGGAGCAATGTGTGTTTGTGGCTGC	1740
Db	1677	AACTCTCAAGAAACAACCCAGATGGAAATTTTGGAGCAATGTGTGTTTGTGGCTGC	1736
Qy	1741	AGGCATTAAGATAGGATATCTATTTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGG	1800
Db	1737	AGGCATTAAGATAGGATATCTATTTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGG	1796
Qy	1801	ATCTTAACCTCATCTAAGAGTTTCCTTCTCAAGAGATGCTCCTCTGGGAGGAGGAGCC	1860
Db	1797	ATCTTAACCTCATCTAAGAGTTTCCTTCTCAAGAGATGCTCCTCTGGGAGGAGGAGCC	1856
Qy	1861	CCAGCAAAGTATGTACAAGACAAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAATCCTC	1920
Db	1857	CCAGCAAAGTATGTACAAGACAAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAATCCTC	1916
Qy	1921	CTCCAGGAGAACGCCATATTTATGTGTGGAGATCCAAAGAAATATGGCCCAAGGATGTA	1980
Db	1917	CTCCAGGAGAACGCCATATTTATGTGTGGAGATCCAAAGAAATATGGCCCAAGGATGTA	1976
Qy	1981	CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAAGTTGAAAAAATCTAGAAGCAATG	2040
Db	1977	CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAAGTTGAAAAAATCTAGAAGCAATG	2036
Qy	2041	AAAAACCTTGGCCATTTTAAAGAAAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA	2097
Db	2037	AAAAACCTTGGCCATTTTAAAGAAAGAAAAACGCTTACCTTCAAGATATTTGGTCATAA	2093

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Result No.	Score	Query Match	Length	DB	ID	Description
1	2081	99.4	3259	3	US-09-318-448-23	Sequence 23, Appl
2	2076.2	99.1	3242	4	US-09-949-016-4215	Sequence 4215, Ap
3	3861.4	18.5	390	3	US-08-905-223-71	Sequence 71, Appl
4	380.6	18.2	601	4	US-09-949-016-150019	Sequence 150019
5	379.4	18.1	3516	4	US-09-949-016-15957	Sequence 15957, A
6	379	18.1	601	4	US-09-949-016-150020	Sequence 150020,
7	190.4	9.1	601	4	US-09-949-016-150037	Sequence 150037,
8	188.8	9.0	601	4	US-09-949-016-150047	Sequence 150047,
9	187.2	8.9	601	4	US-09-949-016-150048	Sequence 150048,
10	186.4	8.9	601	4	US-09-949-016-150046	Sequence 150046,
11	174.4	8.3	2475	4	US-09-566-921-88	Sequence 88, Appl
12	155.2	7.4	601	4	US-09-949-016-150030	Sequence 150030,
13	154.8	7.4	601	4	US-09-949-016-150031	Sequence 150031,
14	130.8	6.2	244	4	US-09-471-276-495	Sequence 495, App
15	128.6	6.1	601	4	US-09-949-016-150007	Sequence 150007,
16	126.2	6.0	601	4	US-09-949-016-150029	Sequence 150029,
17	123.4	5.9	601	4	US-09-949-016-150008	Sequence 150008,
18	123.4	5.9	601	4	US-09-949-016-150055	Sequence 150055,
19	121.4	5.8	601	4	US-09-949-016-150041	Sequence 150041,
20	121.4	5.8	601	4	US-09-949-016-150042	Sequence 150042,
21	99.4	4.7	601	4	US-09-949-016-150032	Sequence 150032,
22	76	3.6	601	4	US-09-949-016-150018	Sequence 150018,
23	58.2	2.8	1863	3	US-09-627-218A-13	Sequence 13, Appl
24	58.2	2.8	1863	4	US-09-765-873A-13	Sequence 13, Appl
25	57.8	2.8	1292	4	US-09-270-767-10272	Sequence 10272, A
26	57.4	2.7	4353	2	US-08-365-486A-18	Sequence 18, Appl
27	57.4	2.7	4353	3	US-08-880-342-18	Sequence 18, Appl

440 CGGCAATTTCTATGACACTGGACATGACATGCTGTAGGTTTAGAACTTTGTTGGTTGAG 499
421 CCCTGGATTGCTGACTCTGCGCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
500 CCCTGGATTGCTGACTCTGCGCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 559
481 GAGGAGATAAGTGGCGCACTCCCGGTGSCATCACTGCATCTCTTGGAGACAGACTTTGTG 540
560 GAGGAGATAAGTGGCGCACTCCCGGTGSCATCACTGCATCTCTTGGAGACAGACTTTGTG 619
541 AAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTTCTGAGATTGATTCAGGA 600
620 AAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTTCTGAGATTGATTCAGGA 679
601 AGAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
680 AGAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 739
661 ATTGAAGACTTTGAGTCTCACTTACCGGTTCCGCTACCCCCACTCTCACAAGCCCTCTCTG 720
740 ATTGAAGACTTTGAGTCTCACTTACCGGTTCCGCTACCCCCACTCTCACAAGCCCTCTCTG 799
721 AATATTCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTTGGCCAG 780
800 AATATTCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTTGGCCAG 859
781 GAGAAAGCCCAAGTATCTGTCACTTTCAGCAGATCCAGTCTTTCAAGTGCCTCAATTCAAAG 840
860 GAGAAAGCCCAAGTATCTGTCACTTTCAGCAGATCCAGTCTTTCAAGTGCCTCAATTCAAAG 919
841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTCGACATT 900
920 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTCGACATT 979
901 TCAAAATACAGACTTTTCTCATCAGCTGGAGATGCCCTTCAGCGTATCTGCCCTAAACAGT 960
980 TCAAAATACAGACTTTTCTCATCAGCTGGAGATGCCCTTCAGCGTATCTGCCCTAAACAGT 1039
961 GATTCGAGGTACAAAGCTTACTCAGAGCTGAGCTTTGAAGATAAAGAGAGACTGC 1020
1040 GATTCGAGGTACAAAGCTTACTCAGAGCTGAGCTTTGAAGATAAAGAGAGACTGC 1099
1021 GTCTCTTTTGAATAAAGGCGACACAAAGAAAGAGGAGTACCTTACCCCGCATATA 1080
1100 GTCTCTTTTGAATAAAGGCGACACAAAGAAAGAGGAGTACCTTACCCCGCATATA 1159
1081 CCTCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
1160 CCTCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1219
1141 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATACCAAGTACAGTGTCTGAAAAGGCGAGG 1200
1220 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATACCAAGTACAGTGTCTGAAAAGGCGAGG 1279
1201 CTACAGGAGCTGTGCAGTAAACAGGGGCGCCGATTAAGCCGCTTTGTACGAGATGCC 1260
1280 CTACAGGAGCTGTGCAGTAAACAGGGGCGCCGATTAAGCCGCTTTGTACGAGATGCC 1339
1261 TGTGCTGCTTTGTTGGATCTCCTCTCGCTTTCCTCTTCCGACCCACCACTCAGTCTC 1320
1340 TGTGCTGCTTTGTTGGATCTCCTCTCGCTTTCCTCTTCCGACCCACCACTCAGTCTC 1399
1321 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
1400 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
1381 TTTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTCTACTGSCACA 1440
1460 TTTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTCTACTGSCACA 1519
1441 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
1520 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1579

1501 CTTTCAGCCAAACATACATGCCATCCCATGAAGACAGCGGGAAAGCCCTGGCTCCTTAAGATA 1560
1580 CTTTCAGCCAAACATACATGCCATCCCATGAAGACAGCGGGAAAGCCCTGGCTCCTTAAGATA 1639
1561 TCCATCTCTCTCTCGAAACAAACAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
1640 TCCATCTCTCTCGAAACAAACAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1699
1621 ATAATGTGGGTTCAGGAACCGGATAGCCCGTTTATTTGGGTTTCTTACAACTAGAGAG 1680
1700 ATAATGTGGGTTCAGGAACCGGATAGCCCGTTTATTTGGGTTTCTTACAACTAGAGAG 1759
1681 AAATCTCAAGAACAAACACCCAGATGGAAATTTTGGGCAATGTG--GTTTGTGGCTGC 1737
1760 AAATCTCAAGAACAAACACCCAGATGGAAATTTTGGGCAATGTGTTGTTTGTGGCTGC 1819
1738 AGGCATAAGGATAGGGAATTTATTTATTCAGAAAGAGCTCAGACATTTTCTTAAGCATGGG 1797
1820 AGGCATAAGGATAGGGAATTTATTTATTCAGAAAGAGCTCAGACATTTTCTTAAGCATGGG 1879
1798 ATCTTAATCTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1857
1880 ATCTTAATCTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1939
1858 CCAGCAAGTATGTACAAAGAACACATCCAGCTTCATGCCAGCAGGTGGCGAGAATCCTC 1917
1940 CCAGCAAGTATGTACAAAGAACACATCCAGCTTCATGCCAGCAGGTGGCGAGAATCCTC 1999
1918 CTCAGGAGAAACGGCCATATTTATGTGTGGAGATGCAAGAAATATATGGCCAAAGATGTA 1977
2000 CTCAGGAGAAACGGCCATATTTATGTGTGGAGATGCAAGAAATATATGGCCAAAGATGTA 2059
1978 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2037
2060 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2119
2038 AAACCCCTGGCCACTTTTAAAGAGAAACCGCTACCTTCAGGATATTTGGTCAATA 2094
2120 AAACCCCTGGCCACTTTTAAAGAGAAACCGCTACCTTCAGGATATTTGGTCAATA 2176

RESULT 2

US-09-949-016-4215
; Sequence 4215, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4215
; LENGTH: 3242
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4215

Query Match 99.1%; Score 2076.2; DB 4; Length 3242;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 2091; Conservative 0; Mismatches 3; Indels 3; Gaps 1;
1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGGCAAGGCAATCGCAGAA 60
|||||

APPLICANT: Lacroix, Bruno
TITLE OF INVENTION: 5' ESTs FOR SECRETED PROTEINS
NUMBER OF SEQUENCES: 503
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 501 West Broadway
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-3505
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy Disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Win95
SOFTWARE: Word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/905,223
FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Israelsen, Ned A.
REGISTRATION NUMBER: 29,655
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 235-8550
TELEFAX: (619) 235-0176
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 390 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: DOUBLE
TOPOLOGY: LINEAR
MOLECULE TYPE: CDNA
ORIGINAL SOURCE:
ORGANISM: Homo Sapiens
TISSUE TYPE: Brain
FEATURE:
NAME/KEY: sig_peptide
LOCATION: 289..357
IDENTIFICATION METHOD: Von Heijne matrix
OTHER INFORMATION: score 6.9
OTHER INFORMATION: seq SLSLASHSVSC/SN
US-08-905-223-71

Query Match 18.5%; Score 386.4; DB 3; Length 390;
Best Local Similarity 99.7%; Pred. No. 3.7e-124;
Matches 387; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 968 AGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAGAGAGACACTGCGTCCTTT 1027
Db 1 AAGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAGAGAGACACTGCGTCCTTT 60
Qy 1028 TGAATAAAGGCGAGACACAAAGAGAGAGAGCTTACCTTACCCCGACATATACCTGCGG 1087
Db 61 TGAATAAAGGCGAGACACAAAGAGAGAGAGCTTACCTTACCCCGACATATACCTGCGG 120
Qy 1088 GATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCTTAAAGG 1147
Db 121 GATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCTTAAAGG 180
Qy 1148 CATTTTTCGAGCCCTTGTGACTATACAGTGCAGTGCCTGAAAGCGCAGGCTACAGG 1207
Db 181 CATTTTTCGAGCCCTTGTGACTATACAGTGCAGTGCCTGAAAGCGCAGGCTACAGG 240
Qy 1208 AGCTGTGCAGTAAACAAGGGCGAGCCGATTATAGCCGCTTTGTACGAGATGCCTGTGCT 1267
Db 241 AGCTGTGCAGTAAACAAGGGCGAGCCGATTATAGCCGCTTTGTACGAGATGCCTGTGCT 300
Qy 1268 GCTTGTGGATCTCTCTCTCGCTTTCCCTTCTTGGCAGCCACCTAGTCTCTGCTCG 1327
Db 301 GCTTGTGGATCTCTCTCTCGCTTTCCCTTCTTGGCAGCCACCTAGTCTCTGCTCG 360
Qy 1328 AACATCTTCTCTAACTTCAACCCAGACC 1355

Db 361 AACATCTTCTCTAACTTCAACCCAGACC 388
RESULT 4
US-09-949-016-150019
Sequence 150019, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 150019
LENGTH: 601
TYPE: DNA
ORGANISM: Human
US-09-949-016-150019
Query Match 18.2%; Score 380.6; DB 4; Length 601;
Best Local Similarity 99.7%; Pred. No. 5.8e-122;
Matches 380; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 401 GTTTAGAACTTGTGGTTTGAGCCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT 460
Db 178 GTTTAGAACTTGTGGTTTGAGCCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT 237
Qy 461 TTAGTCAAGCAGGACAGAGAGAGATAGTGGCGCACTCCCGTGGCATCACTGCAT 520
Db 238 TTAGTCAAGCAGGACAGAGAGAGATAGTGGCGCACTCCCGTGGCATCACTGCAT 297
Qy 521 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 580
Db 298 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 357
Qy 581 TGAGATTTCGATGATTCAGGAAGAAAGGATTCAGGTTTGAAGCAAAATTCAGTGAACA 640
Db 358 TGAGATTTCGATGATTCAGGAAGAAAGGATTCAGGTTTGAAGCAAAATTCAGTGAACA 417
Qy 641 GCAACCAATCCAAATGTTTGAATTCGAAGACTTTGAGTCTCACTTACCGTTCCGTACCCC 700
Db 418 GCAACCAATCCAAATGTTTGAATTCGAAGACTTTGAGTCTCACTTACCGTTCCGTACCCC 477
Qy 701 CACTCTCACAAGCCTCTCTGAATATTCCTGGTTTACCCCAAGAAATTTACAGGTTACATC 760
Db 478 CACTCTCACAAGCCTCTCTGAATATTCCTGGTTTACCCCAAGAAATTTACAGGTTACATC 537
Qy 761 TGCAGGAGTCTCTTGGCCAGG 781
Db 538 TGCAGGAGTCTCTTGGCCAGG 558
RESULT 5
US-09-949-016-15957
Sequence 15957, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14

;; PRIOR APPLICATION NUMBER: 60/241,755
;; PRIOR FILING DATE: 2000-10-20
;; PRIOR APPLICATION NUMBER: 60/237,768
;; PRIOR FILING DATE: 2000-10-03
;; PRIOR APPLICATION NUMBER: 60/231,498
;; PRIOR FILING DATE: 2000-09-08
;; NUMBER OF SEQ ID NOS: 207012
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 15957
;; LENGTH: 35916
;; TYPE: DNA
;; ORGANISM: Human
US-09-949-016-15957

Query Match 18.1%; Score 379.4; DB 4; Length 35916;
Best Local Similarity 99.7%; Pred. No. 4.6e-120;
Matches 380; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 401 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCGACCCCTCAGAAAGCAATT 460
Db 10781 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCGACCCCTCAGAAAGCAATT 10840
QY 461 TTAGGTCAAGCAGAGGACAAGAGGAGATAAGTGGCGCACTCCCGTGGCATCACCCTGCAT 520
Db 10841 TTAGGTCAAGCAGAGGACAAGAGGAGATAAGTGGCGCACTCCCGTGGCATCACCCTGCAT 10900
QY 521 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTC 580
Db 10901 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTC 10960
QY 581 TGAGATTCGATGATTCAGAGGAAAGGATTCGAGGTTTGAAGCAAAATGCAGTGAACA 640
Db 10961 TGAGATTCGATGATTCAGAGGAAAGGATTCGAGGTTTGAAGCAAAATGCAGTGAACA 11020
QY 641 GCAACCAATCAATGTTGAATGAAGACTTGAAGTCTCACTTACCCCGGTTCCGTTACCCC 700
Db 11021 GCAACCAATCAATGTTGAATGAAGACTTGAAGTCTCACTTACCCCGGTTCCGTTACCCC 11080
QY 701 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGGAGATTTTACAGGTACATC 760
Db 11081 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGGAGATTTTACAGGTACATC 11140
QY 761 TGCAGGAGTCTCTTGGCCAGG 781
Db 11141 TGCAGGAGTCTCTTGGCCAGG 11161

RESULT 6
US-09-949-016-150020
; Sequence 150020, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150020
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150020

Query Match 18.1%; Score 379; DB 4; Length 601;

Best Local Similarity 99.5%; Pred. No. 2.1e-121;
Matches 379; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 401 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCGACCCCTCAGAAAGCAATT 460
Db 165 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCGACCCCTCAGAAAGCAATT 224
QY 461 TTAGGTCAAGCAGAGGACAAGAGGAGATAAGTGGCGCACTCCCGTGGCATCACCCTGCAT 520
Db 225 TTAGGTCAAGCAGAGGACAAGAGGAGATAAGTGGCGCACTCCCGTGGCATCACCCTGCAT 284
QY 521 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTC 580
Db 285 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTC 344
QY 581 TGAGATTCGATGATTCAGAGGAAAGGATTCGAGGTTTGAAGCAAAATGCAGTGAACA 640
Db 345 TGAGATTCGATGATTCAGAGGAAAGGATTCGAGGTTTGAAGCAAAATGCAGTGAACA 404
QY 641 GCAACCAATCAATGTTGAATGAAGACTTGAAGTCTCACTTACCCCGGTTCCGTTACCCC 700
Db 405 GCAACCAATCAATGTTGAATGAAGACTTGAAGTCTCACTTACCCCGGTTCCGTTACCCC 464
QY 701 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGGAGATTTTACAGGTACATC 760
Db 465 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGGAGATTTTACAGGTACATC 524
QY 761 TGCAGGAGTCTCTTGGCCAGG 781
Db 525 TGCAGGAGTCTCTTGGCCAGG 545

RESULT 7
US-09-949-016-150037
; Sequence 150037, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150037
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150037

Query Match 9.1%; Score 190.4; DB 4; Length 601;
Best Local Similarity 99.5%; Pred. No. 2.5e-55;
Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1369 AGCTCAAGTTTATTTTCAACCCAGGAAAGCTCCATTTGTCTTCAACATTTGTGAAATTTCTG 1428
Db 18 AGCTCAAGTTTATTTTCAACCCAGGAAAGCTCCATTTGTCTTCAACATTTGTGAAATTTCTG 77
QY 1429 TCTACTGCCACACAGAGGTTCTCGGAGGAGTATGTACAGGTGGCTGGCTTGTGTTG 1488
Db 78 TCTACTGCCACACAGAGGTTCTCGGAGGAGTATGTACAGGTGGCTGGCTTGTGTTG 137
QY 1489 GTTCCTTCAGTTCTTTCAGCCAAACATACATCATCCCATGAGAGAGCGGAAAGCCCTG 1548
Db 138 GTTCCTTCAGTTCTTTCAGCCAAACATACATCATCCCATGAGAGAGCGGAAAGCCCTG 197

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Qy 1549 GCTCCTAAGATA 1560
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Db 198 GCTCCTAAGGTA 209

RESULT 8
US-09-949-016-150047
; Sequence 150047, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150047
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150047

Query Match 9.0%; Score 188.8; DB 4; Length 601;
Best Local Similarity 93.3%; Pred. No. 9.3e-55;
Matches 196; Conservative 1; Mismatches 13; Indels 0; Gaps 0;

Qy 1762 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1821
Db 191 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 250

Qy 1822 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCCGAGCAAGATATGTACAGACAAC 1881
Db 251 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCCGAGCAAGATATGTACAGACAAC 310

Qy 1882 ATCCAGCTTCATGGCCAGAGTGGCGAGAAATCTCTCCAGGAGAACGGCCATATTTAT 1941
Db 311 ATCCAGCTTCATGGCCAGAGTGGCGAGAAATCTCTCCAGGAGAACGGCCATATTTAT 370

Qy 1942 GTGTGTGGAGATGCAAGAATATGCGCCAAG 1971
Db 371 GTGTGTGGTGGATGATTCATTCGTGCTTAAG 400

RESULT 9
US-09-949-016-150048
; Sequence 150048, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150048
; LENGTH: 601
; TYPE: DNA
US-09-949-016-150048

Query Match 8.9%; Score 187.2; DB 4; Length 601;
Best Local Similarity 92.9%; Pred. No. 3.4e-54;
Matches 195; Conservative 1; Mismatches 14; Indels 0; Gaps 0;

Qy 1762 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1821
Db 155 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 214

Qy 1822 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCCGAGCAAGATATGTACAGACAAC 1881
Db 215 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCCGAGCAAGATATGTACAGACAAC 274

Qy 1882 ATCCAGCTTCATGGCCAGAGTGGCGAGAAATCTCTCCAGGAGAACGGCCATATTTAT 1941
Db 275 ATCCAGCTTCATGGCCAGAGTGGCGAGAAATCTCTCCAGGAGAACGGCCATATTTAT 334

Qy 1942 GTGTGTGGAGATGCAAGAATATGCGCCAAG 1971
Db 335 GTGTGTGGTGGATGATTCATTCGTGCTTAAG 364

RESULT 10
US-09-949-016-150046
; Sequence 150046, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150046
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150046

Query Match 8.9%; Score 186.4; DB 4; Length 601;
Best Local Similarity 99.5%; Pred. No. 6.4e-54;
Matches 187; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1762 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1821
Db 413 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 472

Qy 1822 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCCGAGCAAGATATGTACAGACAAC 1881
Db 473 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCCGAGCAAGATATGTACAGACAAC 532

Qy 1882 ATCCAGCTTCATGGCCAGAGTGGCGAGAAATCTCTCCAGGAGAACGGCCATATTTAT 1941
Db 533 ATCCAGCTTCATGGCCAGAGTGGCGAGAAATCTCTCCAGGAGAACGGCCATATTTAT 592

Qy 1942 GTGTGTGG 1949
Db 593 GTGTGTGG 600

RESULT 11
US-09-566-921-88
; Sequence 88, Application US/09566921
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; Patent No. 6682888
; GENERAL INFORMATION:
; APPLICANT: Loring, Jeanne F.
; APPLICANT: Tingley, Debora W.
; APPLICANT: Edwards, Carla M.
; TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE
; FILE REFERENCE: PA-0024 US
; CURRENT APPLICATION NUMBER: US/09/566,921
; CURRENT FILING DATE: 2000-05-05
; NUMBER OF SEQ ID NOS: 138
; SOFTWARE: PERL Program
; SEQ ID NO 88
; LENGTH: 2475
; TYPE: DNA
; ORGANISM: Homo sapiens
; NAME/KEY: misc feature
; FEATURE:
; OTHER INFORMATION: Incyte ID No. 6682888 255828.26
; NAME/KEY: unsure
; LOCATION: 1001, 1011
; OTHER INFORMATION: a, t, c, g, or other
US-09-566-921-88

Query Match 8.3%; Score 174.4; DB 4; Length 2475;
Best Local Similarity 96.7%; Pred. No. 3.3e-49; Indels 0; Gaps 0;
Matches 178; Conservative 0; Mismatches 6;

Qy 510 ATCACTTCATCCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCA 569
Db 1 ATCACTGCATCCTCGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCA 60

Qy 570 AGTCAGGCTTCGAGATTTCGATGATTCAGGAAAGGATTCGAGTTTGAAGCAAAA 629
Db 61 AGTCAGGCTTCGAGATTTCGATGATTCAGGAAAGGATTCGAGTTTGAAGCAAAA 120

Qy 630 TGCAGTGAACAGCACCAATCCAAATGTTGAATTCAGCACTTGAGTCTCATTACCG 689
Db 121 TGCAGTGAACAGCACCAATCCAAATGTTGAATTCAGCACTTGAGTCTCATTACCG 180

Qy 690 TTGC 693
Db 181 TTGC 184

RESULT 12
US-09-949-016-150030
; Sequence 150030, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150030
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150031

Query Match 7.4%; Score 154.8; DB 4; Length 601;
Best Local Similarity 97.5%; Pred. No. 7.6e-43;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 899 TTTCAAATACAGACTTTTCTATCAGCTGAGATGCTTCAGCGTGATCTGCCCTAACA 958
Db 151 TCTAGAAATACAGACTTTTCTATCAGCTGAGATGCTTCAGCGTGATCTGCCCTAACA 210

Qy 959 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 1018
Db 211 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 270

Qy 1019 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAGG 1058
Db 271 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAGG 310

RESULT 13
US-09-949-016-150031
; Sequence 150031, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150031
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150031

Query Match 7.4%; Score 154.8; DB 4; Length 601;
Best Local Similarity 97.5%; Pred. No. 7.6e-43;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 899 TTTCAAATACAGACTTTTCTATCAGCTGAGATGCTTCAGCGTGATCTGCCCTAACA 958
Db 151 TCTAGAAATACAGACTTTTCTATCAGCTGAGATGCTTCAGCGTGATCTGCCCTAACA 210

Qy 959 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 1018
Db 211 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 270

Qy 1019 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAGG 1058
Db 271 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAGG 310

RESULT 14
US-09-471-276-495
; Sequence 495, Application US/09471276
; Patent No. 6822072
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6822072
; FILE REFERENCE: GENSET.025CPI
; CURRENT APPLICATION NUMBER: US/09/471,276
; CURRENT FILING DATE: 1999-12-21
; EARLIER APPLICATION NUMBER: 09/057,719
; EARLIER FILING DATE: 1998-04-09
; EARLIER APPLICATION NUMBER: 09/069,047
; EARLIER FILING DATE: 1998-04-28
; EARLIER APPLICATION NUMBER: PCT/IB99/00712
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; EARLIER FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1622
; SOFTWARE: Patent.pm
; SEQ ID NO 495
; LENGTH: 244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 70..243
; NAME/KEY: sig_peptide
; LOCATION: 70..114
; OTHER INFORMATION: Von Heijne matrix
; OTHER INFORMATION: score 4.40000009536743
; OTHER INFORMATION: seq RFLLIYATQQQA/KA
US-09-471-276-495

Query Match 6.2%; Score 130.8; DB 4; Length 244;
Best Local Similarity 88.1%; Pred. No. 9.2e-35;
Matches 141; Conservative 1; Mismatches 18; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTCTGTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 70 ATGAGGAGGTTCTGTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 129
Qy 61 GAAATGTGTGACGAGCTGTGTACATGGATTTTCAGATCTTCACTGTATTAGTCAA 120
Db 130 GAAATGTGTGACGAGCTGTGTACATGGATTTTCAGATCTTCACTGTATTAGTCAA 189
Qy 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTTG 160
Db 190 TCCGATAAGGTTCTCGGTGATTCAGATACACTACTTTTG 229

RESULT 15
US-09-949-016-150007
; Sequence 150007, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150007
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150007

Query Match 6.1%; Score 128.6; DB 4; Length 601;
Best Local Similarity 99.2%; Pred. No. 1.1e-33;
Matches 128; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTCTGTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 236 ATGAGGAGGTTCTGTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 295
Qy 61 GAAATGTGTGACGAGCTGTGTACATGGATTTTCAGATCTTCACTGTATTAGTCAA 120
Db 296 GAAATGTGTGACGAGCTGTGTACATGGATTTTCAGATCTTCACTGTATTAGTCAA 355
Qy 121 TCCGATAAG 129
Db 121 TCCGATAAG 129

Db 356 TCCGATAAG 364
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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 16:35:10 ; Search time 1121.54 Seconds
(without alignments)
15440.336 Million cell updates/sec

Title: US-09-371-347A-45

Perfect score: 2094

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Total number of hits satisfying chosen parameters: 19589580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

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- 18: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
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- 22: /cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
- 23: /cgn2_6/ptodata/1/pubpna/US10_NEW PUB.seq.*
- 24: /cgn2_6/ptodata/1/pubpna/US10_NEW PUB.seq.*
- 25: /cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
- 26: /cgn2_6/ptodata/1/pubpna/US11_NEW PUB.seq.*
- 27: /cgn2_6/ptodata/1/pubpna/US60_NEW PUB.seq.*
- 28: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	2094	100.0	2094	26	US-11-119-096-45
3	2081	99.4	2097	10	US-09-371-347-1
4	2081	99.4	2097	26	US-11-119-096-1
5	2081	99.4	3259	10	US-09-371-347-24

6	2081	99.4	3259	24	US-10-450-763-874	Sequence 874, App
7	2081	99.4	3259	26	US-11-119-096-24	Sequence 24, Appl
8	2079.4	99.3	2097	10	US-09-371-347-41	Sequence 41, Appl
9	2079.4	99.3	2097	10	US-09-371-347-43	Sequence 43, Appl
10	2079.4	99.3	2097	26	US-11-119-096-41	Sequence 41, Appl
11	2079.4	99.3	2097	26	US-11-119-096-43	Sequence 43, Appl
12	2072.6	99.0	3256	22	US-10-741-600-692	Sequence 692, App
13	2072.6	99.0	3274	22	US-10-741-600-693	Sequence 693, App
14	2063	98.5	2093	10	US-09-371-347-47	Sequence 47, Appl
15	2063	98.5	2093	26	US-11-119-096-47	Sequence 47, Appl
16	379.8	18.1	43985	17	US-10-741-600-17757	Sequence 17757, A
17	379.8	18.1	591	17	US-10-029-386-6369	Sequence 6369, Ap
18	377.8	18.0	591	17	US-10-029-386-1735	Sequence 1735, Ap
19	377.4	18.0	379	17	US-10-029-386-20100	Sequence 20100, A
20	375.8	17.9	379	17	US-10-029-386-15435	Sequence 15435, A
21	286	13.7	583	13	US-09-925-065A-758988	Sequence 758988,
22	284.8	13.6	583	13	US-09-925-065A-827971	Sequence 827971,
23	275.8	13.2	503	24	US-10-450-763-873	Sequence 873, App
24	200.6	9.6	201	22	US-10-741-600-15583	Sequence 15583, A
25	200.6	9.6	201	22	US-10-741-600-15584	Sequence 15584, A
26	200.6	9.6	201	22	US-10-741-600-15589	Sequence 15589, A
27	200.6	9.6	201	22	US-10-741-600-15590	Sequence 15590, A
28	200.6	9.6	201	22	US-10-741-600-15592	Sequence 15592, A
29	200.6	9.6	201	22	US-10-741-600-15594	Sequence 15594, A
30	200.6	9.6	201	22	US-10-741-600-15598	Sequence 15598, A
31	200.6	9.6	201	22	US-10-741-600-15599	Sequence 15599, A
32	200.6	9.6	201	22	US-10-741-600-15600	Sequence 15600, A
33	200.6	9.6	201	22	US-10-741-600-15606	Sequence 15606, A
34	200.6	9.6	201	22	US-10-741-600-15609	Sequence 15609, A
35	200.6	9.6	201	22	US-10-741-600-15610	Sequence 15610, A
36	200.6	9.6	201	22	US-10-741-600-15612	Sequence 15612, A
37	200.6	9.6	201	22	US-10-741-600-15613	Sequence 15613, A
38	200.6	9.6	201	22	US-10-741-600-15614	Sequence 15614, A
39	200.6	9.6	201	22	US-10-741-600-15620	Sequence 15620, A
40	200.6	9.6	201	22	US-10-741-600-15621	Sequence 15621, A
41	200.6	9.6	201	22	US-10-741-600-15623	Sequence 15623, A
42	200.6	9.6	201	22	US-10-741-600-15625	Sequence 15625, A
43	200.6	9.6	201	22	US-10-741-600-15629	Sequence 15629, A
44	200.6	9.6	201	22	US-10-741-600-15630	Sequence 15630, A
45	200.6	9.6	201	22	US-10-741-600-15631	Sequence 15631, A

ALIGNMENTS

RESULT 1

US-09-371-347-45
; Sequence 45, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371.347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
; ORGANISM: Homo sapiens
US-09-371-347-45

Query Match 100.0%; Score 2094; DB 10; Length 2094;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGAGGAGTTCTCTGTTACTATATCTACACAGCAGGACAGGAAAGCCATCGCAGAA 60
Db 1 ATGAGGAGTTCTCTGTTACTATATGCTATACACAGCAGGACAGGAAAGCCATCGCAGAA 60
Qy 61 GAAATGTGTAGCAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 61 GAAATGTGTAGCAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Qy 121 TCCGATAGTATGACCTTAAACCGAACAACGCTCTCTGTTGTTGTTCTTACCCAG 180
Db 121 TCCGATAGTATGACCTTAAACCGAACAACGCTCTCTGTTGTTGTTCTTACCCAG 180
Qy 181 GGCCCGGAGACCCACCGCACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCCCGGAGACCCACCGCACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Qy 241 CTGCCGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTGGGTCTCGGTGATTAGAA 300
Db 241 CTGCCGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTGGGTCTCGGTGATTAGAA 300
Qy 301 TACACCTACTTTGCAATGGGGGAAGATATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTGCAATGGGGGAAGATATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Qy 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAAAGCTTGTGGTTGAG 420
Db 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAAAGCTTGTGGTTGAG 420
Qy 421 CCGTGGATTGTGACTCTGSCCAGCCCTCAGAAAGCATTTTGTAGTCAAGCAGAGGACAA 480
Db 421 CCGTGGATTGTGACTCTGSCCAGCCCTCAGAAAGCATTTTGTAGTCAAGCAGAGGACAA 480
Qy 481 GAGGAGTAAGTGGGCACTCCCGTGGCATCACTGATGCTGAGTTCGATGATTCAGGA 600
Db 481 GAGGAGTAAGTGGGCACTCCCGTGGCATCACTGATGCTGAGTTCGATGATTCAGGA 600
Qy 541 AAGTCAGAGCTGTACACATTTGAAATCTCAAGTCAGAGCTTCTGAGATTCGATGATTCAGGA 660
Db 541 AAGTCAGAGCTGTACACATTTGAAATCTCAAGTCAGAGCTTCTGAGATTCGATGATTCAGGA 660
Qy 601 AGAAAGGATTTCTGAGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 720
Db 601 AGAAAGGATTTCTGAGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 720
Qy 661 ATTGAGAGCTTGTAGTCTCTACTTACCCTGCTGGTACCCCACTCTCAAGCCTCTCTG 780
Db 661 ATTGAGAGCTTGTAGTCTCTACTTACCCTGCTGGTACCCCACTCTCAAGCCTCTCTG 780
Qy 721 AATATTCCTGGTTTACCCCCAGAAATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGGTTTACCCCCAGAAATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
Qy 781 GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTCCCAATTTCAAAG 840
Db 781 GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTCCCAATTTCAAAG 840
Qy 841 GCAGTTCAACTTACAGAAATGATGCCATTAACCACTCTGCTGGTGAATTTGACATTT 900
Db 841 GCAGTTCAACTTACAGAAATGATGCCATTAACCACTCTGCTGGTGAATTTGACATTT 900
Qy 901 TCAATACAGACTTTTCTATCAGCCTGGAGATGCTTTCAGCGTATCTGCCCTAACAGT 960
Db 901 TCAATACAGACTTTTCTATCAGCCTGGAGATGCTTTCAGCGTATCTGCCCTAACAGT 960
Qy 961 GATTCGAGGTACAAAGCCTACTCCAAAGACTGCACTTGAAGTAAAGAGAGCACTTGC 1020
Db 961 GATTCGAGGTACAAAGCCTACTCCAAAGACTGCACTTGAAGTAAAGAGAGCACTTGC 1020
Qy 1021 GTCTTTTGAATAAAGGCGAGACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
Db 1021 GTCTTTTGAATAAAGGCGAGACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
Qy 1081 CCTGGGATGTTCTCTCCAGTTTCATTTTACCTGGTCTTGAATTCGAGCAATTCCT 1140

Db 1081 CCTGGGATGTTCTCTCCAGTTTCATTTTACCTGGTCTTGAATTCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATACCAAGTGCAGTGTGAAAAGGCGAGG 1200
Db 1141 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATACCAAGTGCAGTGTGAAAAGGCGAGG 1200
Qy 1201 CTACAGAGCTGTGCAGTAAACCAAGGGGCGAGCCATATAGCCGCTTGTACGAGATGCC 1260
Db 1201 CTACAGAGCTGTGCAGTAAACCAAGGGGCGAGCCATATAGCCGCTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTGTTGGATCTCTCTCGCTTTCCTTCTTGGCCAGCCACTCAGTCTC 1320
Db 1261 TGTGCTGCTGTTGGATCTCTCTCGCTTTCCTTCTTGGCCAGCCACTCAGTCTC 1320
Qy 1321 CTGCTCGAAATCTTCTTAAACTTCAACCCAGACCATATTCGTTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAAATCTTCTTAAACTTCAACCCAGACCATATTCGTTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTCACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTCACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGAATTTCTGTCTACTGCCACA 1440
Qy 1441 ACAGAGTTCTGCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAAGTT 1500
Db 1441 ACAGAGTTCTGCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAAGTT 1500
Qy 1501 CTTGAGCCAAACATACATGATGCCATGAGAGACAGCGGAAAGCCCTGCTTAAAGATA 1560
Db 1501 CTTGAGCCAAACATACATGATGCCATGAGAGACAGCGGAAAGCCCTGCTTAAAGATA 1560
Qy 1561 TCCATCTCTCTCAACCAACAAATTTTCCACATTTACAGATGACCCCTCAATCCCAATC 1620
Db 1561 TCCATCTCTCTCAACCAACAAATTTTCCACATTTACAGATGACCCCTCAATCCCAATC 1620
Qy 1621 ATAAATGTTGGTTCAGGAAACCGGCATAGCCCGCTTATTTGGGTTCTTAAACATAGAGAG 1680
Db 1621 ATAAATGTTGGTTCAGGAAACCGGCATAGCCCGCTTATTTGGGTTCTTAAACATAGAGAG 1680
Qy 1681 AAATCCAGAAACAAACCCAGATGGAAATTTTGGAGCAATGTGGTTTGGCTGCAGG 1740
Db 1681 AAATCCAGAAACAAACCCAGATGGAAATTTTGGAGCAATGTGGTTTGGCTGCAGG 1740
Qy 1741 CATAAGGATAGGGATTTATTTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATC 1800
Db 1741 CATAAGGATAGGGATTTATTTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATC 1800
Qy 1801 TTAATCATCTTAAAGGTTTCTCTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAAGCCCA 1860
Db 1801 TTAATCATCTTAAAGGTTTCTCTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAAGCCCA 1860
Qy 1861 GCAAAGTATGTACAGACAAATCCAGCTTTCATGGCCAGAGGTTGGGAGGAAATTCCTCTC 1920
Db 1861 GCAAAGTATGTACAGACAAATCCAGCTTTCATGGCCAGAGGTTGGGAGGAAATTCCTCTC 1920
Qy 1921 CAGGAGACGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGAGATGTACAT 1980
Db 1921 CAGGAGACGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGAGATGTACAT 1980
Qy 1981 GATGCCCTTGTGCAAAATAAAGCAAGAGGTTTGGAGTTGAAAACCTAGAAAGCAATGAAA 2040
Db 1981 GATGCCCTTGTGCAAAATAAAGCAAGAGGTTTGGAGTTGAAAACCTAGAAAGCAATGAAA 2040
Qy 2041 ACCCTGGCCACTTTAAAGAAAGAAACGCTTACCTTCAAGTATTTTGGTCTATAA 2094
Db 2041 ACCCTGGCCACTTTAAAGAAAGAAACGCTTACCTTCAAGTATTTTGGTCTATAA 2094

RESULT 2

US-11-119-096-45
; Sequence 45, Application US/11119096
; Publication No. US2005019701A1
; GENERAL INFORMATION:

APPLICANT: Gravel, Roy A,
APPLICANT: Rozen, Rima
APPLICANT: Leclerc, Daniel
APPLICANT: Wilson, Aaron
APPLICANT: Rosenblatt, David
TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
FILE REFERENCE: 50004/003005
CURRENT APPLICATION NUMBER: US/11/119,096
CURRENT FILING DATE: 2005-04-29
PRIOR APPLICATION NUMBER: 09/487,841
PRIOR FILING DATE: 2000-01-19
PRIOR APPLICATION NUMBER: 09/371,347
PRIOR FILING DATE: 1999-08-10
PRIOR APPLICATION NUMBER: 09/232,028
PRIOR FILING DATE: 1999-01-15
PRIOR APPLICATION NUMBER: 60/071,622
PRIOR FILING DATE: 1998-01-16
NUMBER OF SEQ ID NOS: 63
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 45
LENGTH: 2094
TYPE: DNA
ORGANISM: Homo sapiens
US-11-119-096-45

Query Match 100.0%; Score 2094; DB 26; Length 2094;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGAGGAGTTCTGTACTATATGCTACACAGGAGGACGCAAGCCATCGCAGAA 60
Db 1 ATGAGGAGTTCTGTACTATATGCTACACAGGAGGACGCAAGCCATCGCAGAA 60

Qy 61 GAAATGTGTGACGAGCTGTGTATCATGATTTCTGCAGATCTTCACTGATTAGTGAA 120
Db 61 GAAATGTGTGACGAGCTGTGTATCATGATTTCTGCAGATCTTCACTGATTAGTGAA 120

Qy 121 TCCGATAGTATGACCTAAACCGAAACAGCTCTCTGTTGTTGTTGTTCTTACCAAG 180
Db 121 TCCGATAGTATGACCTAAACCGAAACAGCTCTCTGTTGTTGTTGTTCTTACCAAG 180

Qy 181 GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240

Qy 241 CTGCGGTTGATTTCTTGTCTCACTGCGGTATGGGTACTGGGTCTCGGTGATTTCAGAA 300
Db 241 CTGCGGTTGATTTCTTGTCTCACTGCGGTATGGGTACTGGGTCTCGGTGATTTCAGAA 300

Qy 301 TACACCTACTTTTGCATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360

Qy 361 CGGCATTTCTATGACACCTGGACATGACATGCTGTGTAGTTTGAACCTTGTGTTGAG 420
Db 361 CGGCATTTCTATGACACCTGGACATGACATGCTGTGTAGTTTGAACCTTGTGTTGAG 420

Qy 421 CCGTGATGCTGGACTCTGGCGAGCCCTCAGAAAGCAATTTAGTCAAGCAGAGGACAA 480
Db 421 CCGTGATGCTGGACTCTGGCGAGCCCTCAGAAAGCAATTTAGTCAAGCAGAGGACAA 480

Qy 481 CAGGAGATAAGTGGGCACTCCCGTGGCACTCAGCTGATCTTGGAGCAGACCTTGTG 540
Db 481 CAGGAGATAAGTGGGCACTCCCGTGGCACTCAGCTGATCTTGGAGCAGACCTTGTG 540

Qy 541 AAGTCAGAGCTGCTACACATTTCAAGTCAGCTTCTGAGATTCGATGATTTCAGGA 600
Db 541 AAGTCAGAGCTGCTACACATTTCAAGTCAGCTTCTGAGATTCGATGATTTCAGGA 600

Qy 601 AGAAGGATTTCTGAGTTTGAAGCAAAATGCGATGAAACAGCAACCAATCAATGTTGTA 660
Db 601 AGAAGGATTTCTGAGTTTGAAGCAAAATTTGGAGCAATTTGGTGTGTTGTTGGCTGCAGG 1740
1681 AAATCCAGAAACCAACCCAGATGGAATTTGGAGCAATTTGGTGTGTTGTTGGCTGCAGG 1740

Db 601 AGAAGGATTTCTGAGTTTGAAGCAAAATGCGATGAAACAGCAACCAATCAATGTTGTA 660
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTTCGGTACCCCACTCTCACAAGCCCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTTCGGTACCCCACTCTCACAAGCCCTCTCTG 720
Qy 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGGAGTCTCTTGGCCAG 780
Qy 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAG 840
Db 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAG 840
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGACATT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGACATT 900
Qy 901 TCAAATACAGACTTTTCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
Db 901 TCAAATACAGACTTTTCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATATAAAGAGAGACATGC 1020
Db 961 GATTCTGAGGTACAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATATAAAGAGAGACATGC 1020
Qy 1021 GTCCCTTTTGAATAAAGGACACACAAAGAAAGAGGAGCTACCTTACCCAGCATATA 1080
Db 1021 GTCCCTTTTGAATAAAGGACACACAAAGAAAGAGGAGCTACCTTACCCAGCATATA 1080
Qy 1081 CCTCGGGAATGTTCTCTCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1081 CCTCGGGAATGTTCTCTCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGAGCTATACAGTGACGTCTGAAAGGCGCAGG 1200
Db 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGAGCTATACAGTGACGTCTGAAAGGCGCAGG 1200
Qy 1201 CTACAGGAGCTGTGAGTAAACAAAGGGGAGCCGATTTATAGCCGCTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGAGTAAACAAAGGGGAGCCGATTTATAGCCGCTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTTGTGTTGATCTCTCTCGCTTTCCTTTCCTGAGCCACCACTCAGTCTC 1320
Db 1261 TGTGCTGCTTGTGTTGATCTCTCTCGCTTTCCTTTCCTGAGCCACCACTCAGTCTC 1320
Qy 1321 CTGCTCGAACAATCTCTTAACTTCAACCCAGACATATTCGTGAGGAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAACAATCTCTTAACTTCAACCCAGACATATTCGTGAGGAGCTCAAGTTTA 1380
Qy 1381 TTTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
Qy 1441 ACAGAGTTCTGCGGAAAGGAGTATGTAAGCTTGGCTGGCTTGTGTTGTTGTTGTTGTT 1500
Db 1441 ACAGAGTTCTGCGGAAAGGAGTATGTAAGCTTGGCTGGCTTGTGTTGTTGTTGTTGTT 1500
Qy 1501 CTTGAGCCAAACATACATGATCCCATGAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Db 1501 CTTGAGCCAAACATACATGATCCCATGAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Qy 1561 TCCATCTCTCTCGAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCAATC 1620
Db 1561 TCCATCTCTCTCGAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCAATC 1620
Qy 1621 ATAAATGTTGGTCCAGGAAACCGGATAGCCCGCTTTTATTTGGTTTCTTCAACATAGAG 1680
Db 1621 ATAAATGTTGGTCCAGGAAACCGGATAGCCCGCTTTTATTTGGTTTCTTCAACATAGAG 1680
Qy 1681 AAATCCAGAAACCAACCCAGATGGAATTTTGGAGCAATTTGGTGTGTTTGGCTGCAGG 1740
Db 1681 AAATCCAGAAACCAACCCAGATGGAATTTTGGAGCAATTTGGTGTGTTTGGCTGCAGG 1740

Qy	1741	CATAAGGATAGGGATTATCTATT	CAGAAAAGAGCTCAGACATTTCCTTTAAGCATGGGATC	1800
Db	1741	CATAAGGATAGGGATTATCTATT	CAGAAAAGAGCTCAGACATTTCCTTTAAGCATGGGATC	1800
Qy	1801	TTAACTCATCTAAAGGTTTCCTTCT	CAAGAGATGCTCCTGTTGGGAGGAGGAGCCCCA	1860
Db	1801	TTAACTCATCTAAAGGTTTCCTTCT	CAAGAGATGCTCCTGTTGGGAGGAGGAGCCCCA	1860
Qy	1861	GCAAGTGATGTACAAGACAACATCC	AGCTTCATGCCAGCAGGTTGGCGAGAAATCCTCCTC	1920
Db	1861	GCAAGTGATGTACAAGACAACATCC	AGCTTCATGCCAGCAGGTTGGCGAGAAATCCTCCTC	1920
Qy	1921	CAGGAGAA CGGCCATATTTATGTGT	GTGGAGATGCAAAAGAAATATGGCCAAAGGATGTACAT	1980
Db	1921	CAGGAGAA CGGCCATATTTATGTGT	GTGGAGATGCAAAAGAAATATGGCCAAAGGATGTACAT	1980
Qy	1981	GATGCCCTTGTGCAAAATAANTAAG	CAAAAGAGGTTGGAGTTGAAAACCTAGAACCAATGAAA	2040
Db	1981	GATGCCCTTGTGCAAAATAANTAAG	CAAAAGAGGTTGGAGTTGAAAACCTAGAACCAATGAAA	2040
Qy	2041	ACCTGGCCACTTTTAAAGAAGAAAA	ACGCTACCTTCAGGATATTTGGTCATAA	2094
Db	2041	ACCTGGCCACTTTTAAAGAAGAAAA	ACGCTACCTTCAGGATATTTGGTCATAA	2094

RESULT 3

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US-09-371-347-1
; Sequence 1, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-1

```

Qy	301	TACACCTACTTTTGGCAATGGGGGGAAGATAATTTGATATAACGACTTCAAGAGCTTGGAGCC	360
Db	301	TACACCTACTTTTGGCAATGGGGGGAAGATAATTTGATATAACGACTTCAAGAGCTTGGAGCC	360
Qy	361	CGGCATTTCTATGACACTGACACTGCAGATGACGTGTGTAGGTTTAGAACCTTGTGGTTGAG	420
Db	361	CGGCATTTCTATGACACTGACACTGCAGATGACGTGTGTAGGTTTAGAACCTTGTGGTTGAG	420
Qy	421	CCGTGGATTGCTGGACCTTGGCCAGCCCTCAGAAAAGCATTTTATAGTCAAGCAGAGACA	480
Db	421	CCGTGGATTGCTGGACCTTGGCCAGCCCTCAGAAAAGCATTTTATAGTCAAGCAGAGACA	480
Qy	481	GAGGAGATAAGTGGCGCATCTCCCGGTGGCATCACCTGCGATCCTTTGAGGACAGACCTTGTG	540
Db	481	GAGGAGATAAGTGGCGCATCTCCCGGTGGCATCACCTGCGATCCTTTGAGGACAGACCTTGTG	540
Qy	541	AAGTCAAGAGCTGCTACACATTTGAATCTCAAGTCCAGCTTCTGAGATTCGATGATTCAGGA	600
Db	541	AAGTCAAGAGCTGCTACACATTTGAATCTCAAGTCCAGCTTCTGAGATTCGATGATTCAGGA	600
Qy	601	AGAAAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA	660
Db	601	AGAAAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA	660
Qy	661	ATTGAGAGCTTTGAGTGCTCACATTACCGGTTCCGTTACCCCACTCTCACAAAGCCTCTCTG	720
Db	661	ATTGAGAGCTTTGAGTGCTCACATTACCGGTTCCGTTACCCCACTCTCACAAAGCCTCTCTG	720
Qy	721	AATATTCCTGGTTTACCCTCCAGAAATATTTACAGGTACATCTGAGGAGTCTCTTGGCCAG	780
Db	721	AATATTCCTGGTTTACCCTCCAGAAATATTTACAGGTACATCTGAGGAGTCTCTTGGCCAG	780
Qy	781	GAGGAAGCCAAAGTACTGTGACTTCAGCAGATCCAGTTTTCAAGTGCCCAATTCAAAG	840
Db	781	GAGGAAGCCAAAGTACTGTGACTTCAGCAGATCCAGTTTTCAAGTGCCCAATTCAAAG	840
Qy	841	GCAGTTCAACTTACTACGAATGATGCCATAAAAAACACTCTGCTGGTAGAATTTGGACATT	900
Db	841	GCAGTTCAACTTACTACGAATGATGCCATAAAAAACACTCTGCTGGTAGAATTTGGACATT	900
Qy	901	TCAAAATACAGACTTTTCTTATCAGCCTGGAGATGCCCTTACGCGTGATCTGCCCTAACGT	960
Db	901	TCAAAATACAGACTTTTCTTATCAGCCTGGAGATGCCCTTACGCGTGATCTGCCCTAACGT	960
Qy	961	GATTCTCAGGTACAAAGCCCTACTCCAAAGACTGCAGCTTCAAGATAAAAGAGAGCACTGC	1020
Db	961	GATTCTCAGGTACAAAGCCCTACTCCAAAGACTGCAGCTTCAAGATAAAAGAGAGCACTGC	1020
Qy	1021	GTCCTTTTGAATAAAGGCAGACACAAAGAAAGAAAGAGGACTACTTTACCCAGCATATA	1080
Db	1021	GTCCTTTTGAATAAAGGCAGACACAAAGAAAGAAAGAGGACTACTTTACCCAGCATATA	1080
Qy	1081	CCTGCGGAGTTTCTCTCCAGTTTCATTTTACCTGGTGCTCTCAATCCGAGCAATTCCT	1140
Db	1081	CCTGCGGAGTTTCTCTCCAGTTTCATTTTACCTGGTGCTCTCAATCCGAGCAATTCCT	1140
Qy	1141	AAAAAGCATTTTTCGAGCCCTTGTGGACTATACAGTACAGAGTGTCTGAAAAGCGCAGG	1200
Db	1141	AAAAAGCATTTTTCGAGCCCTTGTGGACTATATACAGTACAGAGTGTCTGAAAAGCGCAGG	1200
Qy	1201	CTACAGAGCTGTGCAGTAAACAAGGGGCGAGCCGATTTATAGCGCTTTGTACGAGATGCC	1260
Db	1201	CTACAGAGCTGTGTGCAGTAAACAAGGGGCGAGCCGATTTATAGCGCTTTGTACGAGATGCC	1260
Qy	1261	TGTCCTGCTTGTGTGGATCTCCTCTCGCTTTTCCCTTCTTGGCCAGGCCACCACTCAGTCTC	1320
Db	1261	TGTCCTGCTTGTGTGGATCTCCTCTCGCTTTTCCCTTCTTGGCCAGGCCACCACTCAGTCTC	1320
Qy	1321	CTGCTCGAAACATCTTCTTAAACTTCAAACCGACACATATTTGTTGTTGCAAGCTCAAGTTTA	1380
Db	1321	CTGCTCGAAACATCTTCTTAAACTTCAAACCGACACATATTTGTTGTTGCAAGCTCAAGTTTA	1380

QY 1381 TTTCACCCAGGAAGCTCATTGTTCTTCAACATTTGGGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTCACCCAGGAAGCTCATTGTTCTTCAACATTTGGGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGGTTCTCGGAAGGAGTATGTACAGGCTGGCTGGCTGTGTGTTGCTTCAGTT 1500
Db 1441 ACAGAGGTTCTCGGAAGGAGTATGTACAGGCTGGCTGGCTGTGTGTTGCTTCAGTT 1500
QY 1501 CTTACGCCAAACATACATGTCATCCATGAAGACAGCGGAAAGCCCTGGCTCTAAGATA 1560
Db 1501 CTTACGCCAAACATACATGTCATCCATGAAGACAGCGGAAAGCCCTGGCTCTAAGATA 1560
QY 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGAGCCCTCAATCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGAGCCCTCAATCCCATC 1620
QY 1621 ATAATGGTGGGTCAGGAACCGGCATAGCCCGTTTATTTGGGTTCTTCAACATAGAG 1680
Db 1621 ATAATGGTGGGTCAGGAACCGGCATAGCCCGTTTATTTGGGTTCTTCAACATAGAG 1680
QY 1681 AAACCTCCAAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTG---GTTTTTGGCTGC 1737
Db 1681 AAACCTCCAAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTTGGCTGC 1740
QY 1738 AGGCATTAAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAGCATGG 1797
Db 1741 AGGCATTAAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAGCATGG 1800
QY 1798 ATCTTAACCTCATTAAGGTTCTCTCTCAGAGATGCTCCTGTTGGGGAGGAGGAGCC 1857
Db 1801 ATCTTAACCTCATTAAGGTTCTCTCTCAGAGATGCTCCTGTTGGGGAGGAGGAGCC 1860
QY 1858 CCAGCAAAAGTATGTACAAGAACCAATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCCTC 1917
Db 1861 CCAGCAAAAGTATGTACAAGAACCAATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCCTC 1920
QY 1918 CTCACGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1977
Db 1921 CTCACGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1980
QY 1978 CATGATGCCCTTGTCCAAATATAGCAAGAGGTTGGAGTTGAAAACCTAGAACATG 2037
Db 1981 CATGATGCCCTTGTCCAAATATAGCAAGAGGTTGGAGTTGAAAACCTAGAACATG 2040
QY 2038 AAAACCTGGCCACTTTAAAAGAAAGAAAACCTACCTTCAGGATATTTGGTCATAA 2094
Db 2041 AAAACCTGGCCACTTTAAAAGAAAGAAAACCTACCTTCAGGATATTTGGTCATAA 2097

RESULT 4
US-11-119-096-1
; Sequence 1, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119, 096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16

; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-1

Query Match 99.4%; Score 2081; DB 26; Length 2097;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 3; Gaps 1;

QY 1 ATGAGGAGGTTTCTGTCTACTATATGCTACAGAGGAGGACAGGAAAGCCCATCCAGAA 60
Db 1 ATGAGGAGGTTTCTGTCTACTATATGCTACAGAGGAGGACAGGAAAGCCCATCCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGTACATGATTTTCTGTCAGATCTTCTACTATTAAGTGA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTACATGATTTTCTGTCAGATCTTCTACTATTAAGTGA 120
QY 121 TCCGATTAAGTATGACCTAAACCCGAAACAGCTCCTCTTGTGTGTGTGTGTCTACCAG 180
Db 121 TCCGATTAAGTATGACCTAAACCCGAAACAGCTCCTCTTGTGTGTGTGTGTCTACCAG 180
QY 181 GGCACCGGAGACCCACCCGACACAGCCCGGAAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCCGACACAGCCCGGAAAGTTTGTAAAGAAATACAGAACCAACA 240
QY 241 CTGCGGTTGATTTCTTGTCTCCTGCGGTATGGGTACTGCGGTCTCGGTGATTCAGAA 300
Db 241 CTGCGGTTGATTTCTTGTCTCCTGCGGTATGGGTACTGCGGTCTCGGTGATTCAGAA 300
QY 301 TACACCTACTTTTGAATGGGGGAAAGATAATTTGATAAACGACTTTCAGAGAGCTTCGAGCC 360
Db 301 TACACCTACTTTTGAATGGGGGAAAGATAATTTGATAAACGACTTTCAGAGAGCTTCGAGCC 360
QY 361 CGGCAATTTCTATGACATCTGGACATGATGATGATGATGATGATGATGATGATGATGAT 420
Db 361 CGGCAATTTCTATGACATCTGGACATGATGATGATGATGATGATGATGATGATGATGAT 420
QY 421 CCGTGGATGCTGGACCTCTGCGGAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 421 CCGTGGATGCTGGACCTCTGCGGAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
QY 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCCTGTCATCTTGGAGCAGACAGCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCCTGTCATCTTGGAGCAGACAGCTTGTG 540
QY 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
QY 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCATTTGTA 660
Db 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCATTTGTA 660
QY 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTCCGTTACCCCACTCTCAAGAGCCCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTCCGTTACCCCACTCTCAAGAGCCCTCTG 720
QY 721 AATATTCCTGTTTACCCCAAGATAATTTACAGGTACATCTGAGAGGATCTCTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCAAGATAATTTACAGGTACATCTGAGAGGATCTCTGGCCAG 780
QY 781 GAGGAAAGCCCAAGTATCTGTGACCTTCAGCAGATCCAGTTTTCAGTCCCAATTTCAAG 840
Db 781 GAGGAAAGCCCAAGTATCTGTGACCTTCAGCAGATCCAGTTTTCAGTCCCAATTTCAAG 840
QY 841 GCAGTTTCAACTTACTACCAATGATGCCATAAAACCACTCTGCTGTTAGAAATTTGACATT 900
Db 841 GCAGTTTCAACTTACTACCAATGATGCCATAAAACCACTCTGCTGTTAGAAATTTGACATT 900
QY 901 TCAATACAGACTTTTCTCTATCAGCCTGGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT 960

Db 901 TCATAACAGACTTTCTATACGCTGGAGATGCTTACGGTGATCTGCCCTAAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCCTACTCAAGACTGAGCTTGAAGATAAAGAGAGACTGC 1020
Db 961 GATTCTGAGGTACAAAGCCTACTCAAGACTGAGCTTGAAGATAAAGAGAGACTGC 1020
Qy 1021 GTCCCTTTGAAAATAAAGGCAGACACAAAGAAAGAGAGCTACTTACCCACCATATA 1080
Db 1021 GTCCCTTTGAAAATAAAGGCAGACACAAAGAAAGAGAGCTACTTACCCACCATATA 1080
Qy 1081 CCTGGGAGTCTCTCTCACTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1081 CCTGGGAGTCTCTCTCACTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCAATTTTGGAGCCCTTGTGACTATACCAAGTGAAGTGTGAAAAGCGCAGG 1200
Db 1141 AAAAAGGCAATTTTGGAGCCCTTGTGACTATACCAAGTGAAGTGTGAAAAGCGCAGG 1200
Qy 1201 CTACAGGAGCTGCGAGTAACAAAGGGGCGAGCGATATATAGCCGTTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGCGAGTAACAAAGGGGCGAGCGATATATAGCCGTTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTTGTGTGATCTCTCTCGCTTTCCTCTTCCCTTCCCTTCCCTTCCCTTCCCT 1320
Db 1261 TGTGCTGCTTGTGTGATCTCTCTCGCTTTCCTCTTCCCTTCCCTTCCCTTCCCTTCCCT 1320
Qy 1321 CTGCTCGAATCTTCTTAAACCTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAATCTTCTTAAACCTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTTACCAGCAAGCTCCATTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTACCAGCAAGCTCCATTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCCACA 1440
Qy 1441 ACAGAGGTTCTCGGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTTGTCTTCAGTT 1500
Db 1441 ACAGAGGTTCTCGGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTTGTCTTCAGTT 1500
Qy 1501 CTTGAGCAAAACATACATGCAATCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Db 1501 CTTGAGCAAAACATACATGCAATCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACCAGATGACCCCTCAATCCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACCAGATGACCCCTCAATCCCCATC 1620
Qy 1621 ATAATGTTGGTTCAGGAAACCGGATAGCCCGTTTATTGGGTTTCTTACAAACATAGAG 1680
Db 1621 ATAATGTTGGTTCAGGAAACCGGATAGCCCGTTTATTGGGTTTCTTACAAACATAGAG 1680
Qy 1681 AAACTCCAAGAACAAACACCCAGATGGAAATTTGGAGCAATGTG--GTTTTTGGCTGC 1737
Db 1681 AAACTCCAAGAACAAACACCCAGATGGAAATTTGGAGCAATGTGTTTTTGGCTGC 1740
Qy 1738 AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1797
Db 1741 AGGCATAAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
Qy 1798 ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1857
Db 1801 ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
Qy 1858 CCAGCAAAAGTATGTAACAAGCAAACTCCAGCTTATGCCAGAGAGGTGGCGAGAAATCTC 1917
Db 1861 CCAGCAAAAGTATGTAACAAGCAAACTCCAGCTTATGCCAGAGAGGTGGCGAGAAATCTC 1920
Qy 1918 CTCCAGGAGAGCGGCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGATGTA 1977
Db 1921 CTCCAGGAGAGCGGCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGAGATGTA 1980
Qy 1978 CATGATGCCCTTGTCAAATAATAGCAAAAGAGGTTGGAGTTGAAAATACTAGAACAATG 2037

Db 1981 CATGATGCCCTTGTGCAAAATAATAAGCAAGAGGTTGGAGTTGAAAATACTAGAAGCAATG 2040
Qy 2038 AAAACCTTGGCCACTTTAAAAGAGAAAAGCGCTTACCTTCAAGNATATTTGGTCAATA 2094
Db 2041 AAAACCTTGGCCACTTTAAAAGAGAAAAGCGCTTACCTTCAAGNATATTTGGTCAATA 2097
RESULT 5
US-09-371-347-24
; Sequence 24, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-24
Query Match 99.4%; Score 2081; DB 10; Length 3259;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 3; Gaps 1;
Qy 1 ATGAGGAGGTTTCTGTGTACTATATGCTACAGCAGGAGCAGGCAAGGCCATCGCAGAA 60
Db 80 ATGAGGAGGTTTCTGTGTACTATATGCTACAGCAGGAGCAGGCAAGGCCATCGCAGAA 139
Qy 61 GAAATGTGTGAGCAAGCTGTGTTATGTTTCTGAGATCTTCTCATCTATTAGTAA 120
Db 140 GAAATGTGTGAGCAAGCTGTGTTATGTTTCTGAGATCTTCTCATCTATTAGTAA 199
Qy 121 TCCGATAGTATGACCTTAAACCCGAAACAGCTCCTCTGTGTGTGTGTCTTACACAG 180
Db 200 TCCGATAGTATGACCTTAAACCCGAAACAGCTCCTCTGTGTGTGTGTCTTACACAG 259
Qy 181 GGCACCGGAGACCCACCCGACACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Db 260 GGCACCGGAGACCCACCCGACACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 319
Qy 241 CTGCGGTTGATTTCTTTGTCTACCTGCGGTATGGGTTACTGGGTCTCGGTGATTCAGAA 300
Db 320 CTGCGGTTGATTTCTTTGTCTACCTGCGGTATGGGTTACTGGGTCTCGGTGATTCAGAA 379
Qy 301 TACACCTACTTTTCAATGGGGGAAGATATTCATAAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTCAATGGGGGAAGATATTCATAAACGACTTCAAGAGCTTGGAGCC 439
Qy 361 CGGATTTCTATGACACTGGACATGCTGTGTAGGTTTAGAACTTTGTGGTTGAG 420
Db 440 CGGATTTCTATGACACTGGACATGCTGTGTAGGTTTAGAACTTTGTGGTTGAG 499
Qy 421 CCGTGGATTTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGGACAA 480
Db 500 CCGTGGATTTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGGACAA 559
Qy 481 GAGGAGTAAGTGGCGCACTCCCGTGGCATCACTGCATCTTGGAGCAGACCTTGTG 540
Db 560 GAGGAGTAAGTGGCGCACTCCCGTGGCATCACTGCATCTTGGAGCAGACCTTGTG 619
Qy 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTTCAGGA 600

620 Db AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
601 Qy AGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
680 Db AGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 739
661 Qy ATTGAAGACTTTGAGTCTCACTTACCCGTTCCGGTACCCCACTCTCAAGCCCTCTCTG 720
740 Db ATTGAAGACTTTGAGTCTCACTTACCCGTTCCGGTACCCCACTCTCAAGCCCTCTCTG 799
721 Qy AATATCTCTGGTTTACCCCAAGATATTTACAGGTACATCTGACAGAGTCTCTGCGCAG 780
800 Db AATATCTCTGGTTTACCCCAAGATATTTACAGGTACATCTGACAGAGTCTCTGCGCAG 859
781 Qy GAGGAAAGCCAAAGTATCTGTGACTTTCAGAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 840
860 Db GAGGAAAGCCAAAGTATCTGTGACTTTCAGAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 919
841 Qy GCAGTTCAACTTACTACCAATGATGCCATTAAGCACTCTGCTGTGATGATTCGACATT 900
920 Db GCAGTTCAACTTACTACCAATGATGCCATTAAGCACTCTGCTGTGATGATTCGACATT 979
901 Qy TCAATACAGACTTTTCTATCAGCTCGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
980 Db TCAATACAGACTTTTCTATCAGCTCGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 1039
961 Qy GATTCGAGGTACAAAGCTTCTCCAAAGACTGCACTTTGAAGTAAAGAGAGACCTGC 1020
1040 Db GATTCGAGGTACAAAGCTTCTCCAAAGACTGCACTTTGAAGTAAAGAGAGACCTGC 1099
1021 Qy GTCCCTTTGAAATTAAGGCGAGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
1100 Db GTCCCTTTGAAATTAAGGCGAGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1159
1081 Qy CCTCGGAGATGTTCTCTCCAGTTCAATTTTACCTGCTGCTTGAATCGAGCAATTCCT 1140
1160 Db CCTCGGAGATGTTCTCTCCAGTTCAATTTTACCTGCTGCTTGAATCGAGCAATTCCT 1219
1141 Qy AAAAGGCAATTTTTCGAGGCCCTTGTGACTATACAGTGACAGTGTGAAAGGCGCAGG 1200
1220 Db AAAAGGCAATTTTTCGAGGCCCTTGTGACTATACAGTGACAGTGTGAAAGGCGCAGG 1279
1201 Qy CTACAGGAGCTGTGAGTAAACAGGGGCGCGATTAATAGCGCTTTGTAGAGATGCC 1260
1280 Db CTACAGGAGCTGTGAGTAAACAGGGGCGCGATTAATAGCGCTTTGTAGAGATGCC 1339
1261 Qy TGTGCTCTGTTGAGTCTCTCTGCTGCTTCCCTTCTGCGAGCCACCTCAGTCTC 1320
1340 Db TGTGCTCTGTTGAGTCTCTCTGCTGCTTCCCTTCTGCGAGCCACCTCAGTCTC 1399
1321 Qy CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
1400 Db CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
1381 Qy TTTACCCAGGAAAGCTCAATTTGCTTTTCAACATTTGTTGGAATTTCTGTCTACTGCCACA 1440
1460 Db TTTACCCAGGAAAGCTCAATTTGCTTTTCAACATTTGTTGGAATTTCTGTCTACTGCCACA 1519
1441 Qy ACAGAGGTTCTGCGGAAGGAGTGTACAGCTGCGTGGCTGCTGTTGTTGTTCTCAGTT 1500
1520 Db ACAGAGGTTCTGCGGAAGGAGTGTGTACAGCTGCGTGGCTGCTGTTGTTGTTCTCAGTT 1579
1501 Qy CTTACGCAAAACATACATGCTATCCCATGAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1560
1580 Db CTTACGCAAAACATACATGCTATCCCATGAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1639
1561 Qy TCCATCTCTCTCGAAACAAATTTCTTTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
1640 Db TCCATCTCTCTCGAAACAAATTTCTTTTCCATTTACAGATGACCCCTCAATCCCCATC 1699
1621 Qy ATAATGGTGGTCCAGGAAACCGGCATAGCCCGGTTTATTTGGTTCCTACAACATAGAG 1680
1700 Db ATAATGGTGGTCCAGGAAACCGGCATAGCCCGGTTTATTTGGTTCCTACAACATAGAG 1759

1681 Qy AAACCTCCAGAACCAACACCCAGATGGAATTTTGGAGCAATGTG---GTTTTTGGCTGC 1737
1760 Db AAACCTCCAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTTGGCTGC 1819
1738 Qy AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTTAAGCATGGG 1797
1820 Db AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTTAAGCATGGG 1879
1798 Qy ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCC 1857
1880 Db ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCC 1939
1858 Qy CCAGCAAAAGTATGTAACAAGCAACATCCAGCTTCAATGGCCAGAGTGGCGAGAAATCTCTC 1917
1940 Db CCAGCAAAAGTATGTAACAAGCAACATCCAGCTTCAATGGCCAGAGTGGCGAGAAATCTCTC 1999
1918 Qy CTCAGGAGAAAGCGCCATATTTATGTGTGGAGATGCAAAAGATATATGGCCAAGGATGTA 1977
2000 Db CTCAGGAGAAAGCGCCATATTTATGTGTGGAGATGCAAAAGATATATGGCCAAGGATGTA 2059
1978 Qy CATGATGCCCTTGTGCAAAATTAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2037
2060 Db CATGATGCCCTTGTGCAAAATTAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2119
2038 Qy AAAACCTCGCCACTTTTAAAGAAAGAAACCGCTACCTTCAGGATATTTGGTCTATAA 2094
2120 Db AAAACCTCGCCACTTTTAAAGAAAGAAACCGCTACCTTCAGGATATTTGGTCTATAA 2176

RESULT 6

US-10-450-763-874
; Sequence 874, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hysq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIEP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 874
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIMILAR
; LOCATION: (80)..(2173)
; OTHER INFORMATION: 100% homologous to Homo sapiens methionine synthase
; OTHER INFORMATION: reductase, accession number AF025794, Smith-Waterman Score=3624.
US-10-450-763-874

Query Match 99.4%; Score 2081; DB 24; Length 3259;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 3; Gaps 1;
Qy 1 ATGAGGAGTTTCTGTTACTATATGCTACAGAGGAGGCAAGGCAATCCAGAA 60
Db 80 ATGAGGAGTTTCTGTTACTATATGCTACAGAGGAGGCAAGGCAATCCAGAA 139
Qy 61 GAAATGTGTAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTCACTGTATTAGTGA 120
Db 140 GAAATGTGTAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTCACTGTATTAGTGA 199
Qy 121 TCCGATAGTATGACCTTAAAAACCGAAACAGCTCTCTTGTGTGTGTTTCTACCAAG 180

Db 200 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCCTCTTGTGTGTGTGTCTTACCAAG 259
Qy 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAAACCAACA 240
Db 260 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAAACCAACA 319
Qy 241 CTGCGGGTTGATTCTCTTGTCTCACCTGGGTATGGGTCTCGGTCTCGGTGATTCAGAA 300
Db 320 CTGCGGGTTGATTCTCTTGTCTCACCTGGGTATGGGTCTCGGTCTCGGTGATTCAGAA 379
Qy 301 TACACCTACTTTTGCATGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTGCATGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 439
Qy 361 CGGCATTCTATGACATGGACATGCAGATGACTGTGTAGTCTTGTAGACTTTGTGTGAG 420
Db 440 CGGCATTCTATGACATGGACATGCAGATGACTGTGTAGTCTTGTAGACTTTGTGTGAG 499
Qy 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 500 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 559
Qy 481 GAGGAGATAAGTGGCGCATCCCGGTGGCATCACTGCATCCTTGAGGACAGACTTGTG 540
Db 560 GAGGAGATAAGTGGCGCATCCCGGTGGCATCACTGCATCCTTGAGGACAGACTTGTG 619
Qy 541 AAGTCAGAGCTGTACACATTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGCTGTACACATTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGGA 679
Qy 601 AGAAAGGATTCTGAGGTTTGAAGCAAAATCSAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 680 AGAAAGGATTCTGAGGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCAAATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCCTGTCGGTACCCCACTCTCACAGCCCTCTG 720
Db 740 ATTGAAGACTTTGAGTCTCTCACTTACCCTGTCGGTACCCCACTCTCACAGCCCTCTG 799
Qy 721 AATATTCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGGATCTCTGGCCAG 780
Db 800 AATATTCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGGATCTCTGGCCAG 859
Qy 781 GAGGAAAGCCAAAGTATCTGCATCTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAAG 840
Db 860 GAGGAAAGCCAAAGTATCTGCATCTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAAG 919
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTGAATTTGACATT 900
Db 920 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTGAATTTGACATT 979
Qy 901 TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCCCTTACGGGTGATCTGCCCTAACAGT 960
Db 980 TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCCCTTACGGGTGATCTGCCCTAACAGT 1039
Qy 961 GATTCTGAGGTACAAAGCCCTACTCCAAAGACTGCAGCTTGAAGATAAAGAGAGCACTGC 1020
Db 1040 GATTCTGAGGTACAAAGCCCTACTCCAAAGACTGCAGCTTGAAGATAAAGAGAGCACTGC 1099
Qy 1021 GTCTCTTTTGAATAAAGGCGACACAAAGAGAAAGGAGCTTACCTTACCCCAAGATATA 1080
Db 1100 GTCTCTTTTGAATAAAGGCGACACAAAGAGAAAGGAGCTTACCTTACCCCAAGATATA 1159
Qy 1081 CCTGGGAGATGTTCTCTCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1160 CCTGGGAGATGTTCTCTCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1219
Qy 1141 AAAAGGCAATTTTTCGAGCCCTTCTGACTATACAGTGACGTGCAAGGCGAGG 1200
Db 1220 AAAAGGCAATTTTTCGAGCCCTTCTGACTATACAGTGACGTGCAAGGCGAGG 1279
Qy 1201 CTACAGGAGCTGTGCAGTAAACAAAGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGCAGTAAACAAAGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC 1339

Qy 1261 TGTGCCCTGCTTGTGTGGATCTCCTCCTCGCTTTCCTCTTCCCTGCGAGCCACCACTCAGTCTC 1320
Db 1340 TGTGCCCTGCTTGTGTGGATCTCCTCCTCGCTTTCCTCTTCCCTGCGAGCCACCACTCAGTCTC 1399
Qy 1321 CTGCTCGAAACATCTTCCCTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAAACATCTTCCCTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
Qy 1381 TTTTCCACCCAGAAAGCTCCATTTTGTCTTCAACATTTGTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTTCCACCCAGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
Qy 1441 ACAGAGGTTCTGCGGAAGGAGTATGTACAGCTGGCTTGGCTTGTGTGCTTTCAGTT 1500
Db 1520 ACAGAGGTTCTGCGGAAGGAGTATGTACAGCTGGCTTGGCTTGTGTGCTTTCAGTT 1579
Qy 1501 CTTTCCAGCAAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGGCTCTCTAAAGATA 1560
Db 1580 CTTTCCAGCAAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGGCTCTCTAAAGATA 1639
Qy 1561 TCCATCTCTCTCGAAACAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCAATC 1620
Db 1640 TCCATCTCTCTCGAAACAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCAATC 1699
Qy 1621 ATATATGCTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGGTTTCTTACACATAGAGAG 1680
Db 1700 ATATATGCTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGGTTTCTTACACATAGAGAG 1759
Qy 1681 AAACCTCCAAAGAAACCAACCCAGATGGAATTTTTCGAGCAATGTG---GTTTTTGGCTGC 1737
Db 1760 AAACCTCCAAAGAAACCAACCCAGATGGAATTTTTCGAGCAATGTGTGTTTTTGGCTGC 1819
Qy 1738 AGGCAATAGGATAGGATATCTATTAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1797
Db 1820 AGGCAATAGGATAGGATATCTATTAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1879
Qy 1798 ATCTTAACTCATCTAAAGGTTTCTCTTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1857
Db 1880 ATCTTAACTCATCTAAAGGTTTCTCTTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1939
Qy 1858 CCAGCAAAAGTATGTACAGACAAACATCCAGCTTTCATGCGCCAGCAGGTGGCGAGAAATCCTC 1917
Db 1940 CCAGCAAAAGTATGTACAGACAAACATCCAGCTTTCATGCGCCAGCAGGTGGCGAGAAATCCTC 1999
Qy 1918 CTCAGAGAAACGGCCATATTTTATGTGTGTGAGATGCAAAAGATATGGCCCAAGATGTA 1977
Db 2000 CTCAGAGAAACGGCCATATTTTATGTGTGTGAGATGCAAAAGATATGGCCCAAGATGTA 2059
Qy 1978 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2037
Db 2060 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2119
Qy 2038 AAAACCCCTGGCCACTTTAAAAAGAGAAAAACGCTACCTTTCAGGATATTTGGTCTATAA 2094
Db 2120 AAAACCCCTGGCCACTTTAAAAAGAGAAAAACGCTACCTTTCAGGATATTTGGTCTATAA 2176

RESULT 7

US-11-119-096-24

; Sequence 24, Application US/11119096

; Publication No: US20050191701A1

; GENERAL INFORMATION:

; APPLICANT: Gravel, Roy A,

; APPLICANT: Rozen, Rima

; APPLICANT: Leclerc, Daniel

; APPLICANT: Wilson, Aaron

; APPLICANT: Rosenblatt, David

; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE.

; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE

; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME

; FILE REFERENCE: 50004/003005

; CURRENT APPLICATION NUMBER: US/11/119,096

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; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-24

Query Match      99.4%; Score 2081; DB 26; Length 3259;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 3; Gaps 1;

Qy 1 ATGAGGAGTTCTCTTACTATATGCTACACAGCGGACAGGCAAGGCCATCGCAGAA 60
Db      |||
Qy 80 ATGAGGAGTTCTCTTACTATATGCTACACAGCGGACAGGCAAGGCCATCGCAGAA 139
Db      |||
Qy 61 GAAATGTGTGAGCAAGCTGTGTAATGGAATTTCTGAGATCTTCACTGATATTAGTGA 120
Db      |||
Qy 140 GAAATGTGTGAGCAAGCTGTGTAATGGAATTTCTGAGATCTTCACTGATATTAGTGA 199
Db      |||
Qy 121 TCCGATAGTATGACCTAAACCCGACAGCTCTCTGTTGTTGTTCTTACCAG 180
Db      |||
Qy 200 TCCGATAGTATGACCTAAACCCGACAGCTCTCTGTTGTTGTTCTTACCAG 259
Db      |||
Qy 181 GGCACCGAGACCCACCGACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db      |||
Qy 260 GGCACCGAGACCCACCGACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
Db      |||
Qy 241 CTGCCGTTGATTTCTTTGCTCACCCTGCGGTTATGCGGTTCTCGGTGATTCAGAA 300
Db      |||
Qy 320 CTGCCGTTGATTTCTTTGCTCACCCTGCGGTTATGCGGTTCTCGGTGATTCAGAA 379
Db      |||
Qy 301 TACACTACTTTTGAATGGGGGGAAGATAATGATAACGACTTCAAGAGCTTGGAGCC 360
Db      |||
Qy 380 TACACTACTTTTGAATGGGGGGAAGATAATGATAACGACTTCAAGAGCTTGGAGCC 439
Db      |||
Qy 361 CGGCATTTCTATGACACTGGACATGACATGCTGTAGGTTTATAGAACTTGTGTTGAG 420
Db      |||
Qy 440 CGGCATTTCTATGACACTGGACATGACATGCTGTAGGTTTATAGAACTTGTGTTGAG 499
Db      |||
Qy 421 CCGTGGATTTGCTGGAATCTGCGGACCCCTCAGAAAGCATTTTATGCTAAGCAGAGCA 480
Db      |||
Qy 500 CCGTGGATTTGCTGGAATCTGCGGACCCCTCAGAAAGCATTTTATGCTAAGCAGAGCA 559
Db      |||
Qy 481 GAGGAGATTAAGTGGGCGACTCCGGTGGCATCACTGATCTTGGAGACAGACCTTGTG 540
Db      |||
Qy 560 GAGGAGATTAAGTGGGCGACTCCGGTGGCATCACTGATCTTGGAGACAGACCTTGTG 619
Db      |||
Qy 541 AAGTCAGAGCTGCTACACATTCATCAATTCAGTCTGAGCTTCTGAGATTCGATGATTCAG 600
Db      |||
Qy 620 AAGTCAGAGCTGCTACACATTCATCAATTCAGTCTGAGCTTCTGAGATTCGATGATTCAG 679
Db      |||
Qy 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
Db      |||
Qy 680 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 739
Db      |||
Qy 661 ATTGAAGATTTGAGTCTCACTTACCGTTCCGTTACCCCACTCTCAAGCCCTCTCTG 720
Db      |||
Qy 740 ATTGAAGATTTGAGTCTCACTTACCGTTCCGTTACCCCACTCTCAAGCCCTCTCTG 799
Db      |||
Qy 721 AATATTCCTGGTTTACCCCAAGAAATTTACAGGTACATCTGCAAGGATCTCTTGGCCAG 780
Db      |||
Qy 800 AATATTCCTGGTTTACCCCAAGAAATTTACAGGTACATCTGCAAGGATCTCTTGGCCAG 859
Db      |||
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Qy 781 GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTTCAAGTGCCCAATTTCAAAG 840
Db      |||
Qy 860 GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTTCAAGTGCCCAATTTCAAAG 919
Db      |||
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTTGAGAAATTTGACATTT 900
Db      |||
Qy 920 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTTGAGAAATTTGACATTT 979
Db      |||
Qy 901 TCAAAATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCGCTTAAACAGT 960
Db      |||
Qy 980 TCAAAATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCGCTTAAACAGT 1039
Db      |||
Qy 961 GATTCGAGGTACAAAGCCTTCTCTCAAGACTGCGAGCTTGAAGATAAAAGAGAGACACTGC 1020
Db      |||
Qy 1040 GATTCGAGGTACAAAGCCTTCTCTCAAGACTGCGAGCTTGAAGATAAAAGAGAGACACTGC 1099
Db      |||
Qy 1021 GTCTCTTTTGAATAAAGGCGACACAAAGAGAGAGAGAGCTTACCTTACCCAGCATATA 1080
Db      |||
Qy 1100 GTCTCTTTTGAATAAAGGCGACACAAAGAGAGAGAGAGCTTACCTTACCCAGCATATA 1159
Db      |||
Qy 1081 CTGCGGAGTGTCTCTCCAGTTCAATTTTACCTGCTGCTTGTGAATCCGAGCAATTCCT 1140
Db      |||
Qy 1160 CTGCGGAGTGTCTCTCCAGTTCAATTTTACCTGCTGCTTGTGAATCCGAGCAATTCCT 1219
Db      |||
Qy 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGCACTATACCACTGACAGTCTGAAAAGCGCAGG 1200
Db      |||
Qy 1220 AAAAAGGCAATTTTTCGAGCCCTTGTGCACTATACCACTGACAGTCTGAAAAGCGCAGG 1279
Db      |||
Qy 1201 CTACAGGAGCTGTCAGTAAACAAAGGCGACCCGATTAATAGCCGTTTGTAGAGATGCC 1260
Db      |||
Qy 1280 CTACAGGAGCTGTCAGTAAACAAAGGCGACCCGATTAATAGCCGTTTGTAGAGATGCC 1339
Db      |||
Qy 1261 TGTGCTCTTGTGAGATCTCTCTCTGCTTTTCCCTTCTGCGACCCACCACTCAAGTCTC 1320
Db      |||
Qy 1340 TGTGCTCTTGTGAGATCTCTCTCTGCTTTCCCTTCTGCGACCCACCACTCAAGTCTC 1399
Db      |||
Qy 1321 CTGCTCGAAATCTTCTTAAACCTTCAACCCAGACCATATTCGTTGTCAGGCTCAAGTTTA 1380
Db      |||
Qy 1400 CTGCTCGAAATCTTCTTAAACCTTCAACCCAGACCATATTCGTTGTCAGGCTCAAGTTTA 1459
Db      |||
Qy 1381 TTTCCACCCAGGAAAGCTCCTATTTGCTTCAACATTTGGAATTTCTCTCTACTGCCACA 1440
Db      |||
Qy 1460 TTTCCACCCAGGAAAGCTCCTATTTGCTTCAACATTTGGAATTTCTCTCTACTGCCACA 1519
Db      |||
Qy 1441 ACAGAGGTTCTGCGGAGGAGATGTACAGGCTGGCTGGCTTGTGTTGTTGTTTCAAGTT 1500
Db      |||
Qy 1520 ACAGAGGTTCTGCGGAGGAGATGTACAGGCTGGCTGGCTTGTGTTGTTGTTTCAAGTT 1579
Db      |||
Qy 1501 CTTGAGCCAAACATACATGCAATCCCATGAAAGAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Db      |||
Qy 1580 CTTGAGCCAAACATACATGCAATCCCATGAAAGAGCGGGAAGCCCTGGCTCTTAAGATA 1639
Db      |||
Qy 1561 TCCATCTCTCTGCAACCAAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCCATC 1620
Db      |||
Qy 1640 TCCATCTCTCTGCAACCAAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCCATC 1699
Db      |||
Qy 1621 ATAATGTTGGTCTCAGGAAACCGGATAGCCCGCTTTATTTGGGTTCTTCAACATAGAGAG 1680
Db      |||
Qy 1700 ATAATGTTGGTCTCAGGAAACCGGATAGCCCGCTTTATTTGGGTTCTTCAACATAGAGAG 1759
Db      |||
Qy 1681 AAATCTCAAGAAACAAACCCAGATGGAATTTTGGAGCAATGTG -- GTTTTTTGGCTGC 1737
Db      |||
Qy 1760 AAATCTCAAGAAACAAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
Db      |||
Qy 1738 AGGCATAGGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTCTTAAGCATGGG 1797
Db      |||
Qy 1820 AGGCATAGGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTCTTAAGCATGGG 1879
Db      |||
Qy 1798 ATCTTAATCTCAATTAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAGGAGCC 1857
Db      |||
Qy 1880 ATCTTAATCTCAATTAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAGGAGCC 1939
Db      |||
Qy 1858 CCAGAAAGTATGTACAGACAAACATCCAGCTTTCATGGCCAGCAGGTTGGCGAATCTCTC 1917
Db      |||
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Db 1501 CTTGAGCCAAACATACATGATCCATCCATGAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1560
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAACAAATTTCTTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
Qy 1621 ATAATGTGGGTCCAGGAACCGGATATGCGGTTTATTTGGTTCTTACACATAGAGAG 1680
Db 1621 ATAATGTGGGTCCAGGAACCGGATATGCGGTTTATTTGGTTCTTACACATAGAGAG 1680
Qy 1681 AAACTCCAAGAAACAAACACCCAGATGGAATTTTGGAGCAATGTG--GTTTTTGGCTGC 1737
Db 1681 AAACTCCAAGAAACAAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
Qy 1738 AGGCATAGGATAGGATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTTAAGCATGGG 1797
Db 1741 AGGCATAGGATAGGATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTTAAGCATGGG 1800
Qy 1798 ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGGAAGCC 1857
Db 1801 ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGGAAGCC 1860
Qy 1858 CCAGCAAGATGATGACAGACAAACATCCAGCTTCATGGCCAGAGGTGGCGAGAACTCTC 1917
Db 1861 CCAGCAAGATGATGACAGACAAACATCCAGCTTCATGGCCAGAGGTGGCGAGAACTCTC 1920
Qy 1918 CTCAGGAGAACGGCCATTTATTTGTGTGGAGATGCAAGAAATPATGGCCAAAGATGTA 1977
Db 1921 CTCAGGAGAACGGCCATTTATTTGTGTGGAGATGCAAGAAATPATGGCCAAAGATGTA 1980
Qy 1978 CATGATGCCCTTGTGCAATTAATTAAGCAAGAGGTGGAGTTGAAACTAAGAGCAATG 2037
Db 1981 CATGATGCCCTTGTGCAATTAATTAAGCAAGAGGTGGAGTTGAAACTAAGAGCAATG 2040
Qy 2038 AAAACCCCTGGCCACTTTAAAAGAGAAACCGCTACCTTCAGGATATTTGGTCAATA 2094
Db 2041 AAAACCCCTGGCCACTTTAAAAGAGAAACCGCTACCTTCAGGATATTTGGTCAATA 2097

RESULT 9
US-09-371-347-43
; Sequence 43 Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHYLONE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371.347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-43

Query Match 99.3%; Score 2079.4; DB 10; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;

Qy 1 ATGAGGAGTTTCTGTTACTATATGCTACAGAGGAGGACGAAAGCCATCGCAGAA 60
Db 1 ATGAGGAGTTTCTGTTACTATATGCTACAGAGGAGGACGAAAGCCATCGCAGAA 60
Qy 61 GAAATGTGTAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120

Db 61 GAAATGTGTAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Qy 121 TCCGATTAAGTATGACTAAATAACCGAAACAGCTCTCTTGTGTGTGTGTCTTCTACACAG 180
Db 121 TCCGATTAAGTATGACTAAATAACCGAAACAGCTCTCTTGTGTGTGTGTCTTCTACACAG 180
Qy 181 GGCAACCGGAGACCCACCGGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCAACCGGAGACCCACCGGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Qy 241 CTGCGGTTGATTTCTTTTGTCTCACCTGCGGTATGGGTCTCGGTGATTCAGAA 300
Db 241 CTGCGGTTGATTTCTTTTGTCTCACCTGCGGTATGGGTCTCGGTGATTCAGAA 300
Qy 301 TACACCTACTTTTGCATTTGGGGGGAAGATAATTTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATTTGGGGGGAAGATAATTTGATAAACGACTTCAAGAGCTTGGAGCC 360
Qy 361 CGGCATTTCTATGACACTGGACATGCGAGATGACTGTGTAGGTTTGAACATTTGTGTTGAG 420
Db 361 CGGCATTTCTATGACACTGGACATGCGAGATGACTGTGTAGGTTTGAACATTTGTGTTGAG 420
Qy 421 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGACAA 480
Db 421 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGACAA 480
Qy 481 GAGGAGATAAGTGGCGCATCTCCCGTGGCATCACCTGTCATCTTGGAGGACAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCATCTCCCGTGGCATCACCTGTCATCTTGGAGGACAGACCTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Qy 601 AGAAAGGATTTCTGAGTTTTCGAAGCAAAATTCAGTGAAACAGCAACCAATCCAATGTGTA 660
Db 601 AGAAAGGATTTCTGAGTTTTCGAAGCAAAATTCAGTGAAACAGCAACCAATCCAATGTGTA 660
Qy 661 ATTGAAGACTTTTGGTGTCTCTCACTTACCCGTTCCGTACCCCACTCTCAAGCCCTCTCTG 720
Db 661 ATTGAAGACTTTTGGTGTCTCTCACTTACCCGTTCCGTACCCCACTCTCAAGCCCTCTCTG 720
Qy 721 AATATTCCTGTGTTACCCCGAATAATTTACAGGTACATCTGCGAGGATCTCTTGGCCAG 780
Db 721 AATATTCCTGTGTTACCCCGAATAATTTACAGGTACATCTGCGAGGATCTCTTGGCCAG 780
Qy 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAG 840
Db 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAG 840
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGACATTT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGACATTT 900
Qy 901 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTTTACGCGTGTATCTGCGCTAACAGT 960
Db 901 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTTTACGCGTGTATCTGCGCTAACAGT 960
Qy 961 GATTTCTGAGGTACAAAGCTTACTCCAAAGCTGAGCTTGAAGATAAAGAGAGACACTGC 1020
Db 961 GATTTCTGAGGTACAAAGCTTACTCCAAAGCTGAGCTTGAAGATAAAGAGAGACACTGC 1020
Qy 1021 GTCTCTTTGAAATATAAGGCGACACAAAGAAAGAGGAGCTTACCTTACCCAGCATATA 1080
Db 1021 GTCTCTTTGAAATATAAGGCGACACAAAGAAAGAGGAGCTTACCTTACCCAGCATATA 1080
Qy 1081 CCTCGGGAATTTCTTCCAGTTCAATTTTACCTGGTCTTGTGAATTCGAGCAATTCCT 1140
Db 1081 CCTCGGGAATTTCTTCCAGTTCAATTTTACCTGGTCTTGTGAATTCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGCACTATACCAGTGACAGTCTGAAAGGCGAGG 1200
Db 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGCACTATACCAGTGACAGTCTGAAAGGCGAGG 1200


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Qy 1201 CTACAGAGCTGTGCAGTAACAGAGGGGACGCCAATTATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGAGCTGTGCAGTAACAGAGGGGACGCCAATTATAGCCGCTTTGTACGAGATGCC 1260
Qy 1261 TGTGCGCTGCTGTTGGATCTCCTCGCTTTCCTCTCTTCCTGCTTCCTGCGACGACCACTCAGTCTC 1320
Db 1261 TGTGCGCTGCTGTTGGATCTCCTCGCTTTCCTCTCTTCCTGCTTCCTGCGACGACCACTCAGTCTC 1320
Qy 1321 CTGCTCGAACAATCTTCCTAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAACAATCTTCCTAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTTCAACCCAGAAAGCTCCATTTTGTCTTCAACAATTTGGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTCAACCCAGAAAGCTCCATTTTGTCTTCAACAATTTGGAATTTCTGTCTACTGCCACA 1440
Qy 1441 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGGCTTGTGTTGCTTCAGTT 1500
Db 1441 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGGCTTGTGTTGCTTCAGTT 1500
Qy 1501 CTTTCAGGCAAAATACATATGCCATGCAAGACAGCGGAAAGCCCTGGCTCTCTAAAGATA 1560
Db 1501 CTTTCAGGCAAAATACATATGCCATGCAAGACAGCGGAAAGCCCTGGCTCTCTAAAGATA 1560
Qy 1561 TCCATCTCTCCTCGAACAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCCATC 1620
Db 1561 TCCATCTCTCCTCGAACAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCCATC 1620
Qy 1621 ATAATGTTGGGTTCAGGAACCGGATAGCCCGCTTTATTTGGGTTCTTCAACATAGAGAG 1680
Db 1621 ATAATGTTGGGTTCAGGAACCGGATAGCCCGCTTTATTTGGGTTCTTCAACATAGAGAG 1680
Qy 1681 AAATCTCAAGAAACACACCCAGATGGAATTTTGGAGCAATGTG --- GTTTTTTGGCTGC 1737
Db 1681 AAATCTCAAGAAACACACCCAGATGGAATTTTGGAGCAATGTGTTTGGCTGC 1740
Qy 1738 AGGATAAGGATAGGATATCTATTTCAGAAAAGCTCAGACATTTCTTAAAGCATGG 1797
Db 1741 AGGATAAGGATAGGATATCTATTTCAGAAAAGCTCAGACATTTCTTAAAGCATGG 1800
Qy 1798 ATCTTAATCTCATTAAGGTTTCTCTTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1857
Db 1801 ATCTTAATCTCATTAAGGTTTCTCTTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
Qy 1858 CCAGCAAAATGTATCAAGACAAATCCAGCTTTCATGGCCAGAGGTGGCGAGATCTCTC 1917
Db 1861 CCAGCAAAATGTATCAAGACAAATCCAGCTTTCATGGCCAGAGGTGGCGAGATCTCTC 1920
Qy 1918 CTCACGAGAAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGGATGTA 1977
Db 1921 CTCACGAGAAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGGATGTA 1980
Qy 1978 CATGATGCCCTGTGCAAAATATAGCAAAAGAGTTGGAGTTGAAAACTAGAACAATG 2037
Db 1981 CATGATGCCCTGTGCAAAATATAGCAAAAGAGTTGGAGTTGAAAACTAGAACAATG 2040
Qy 2038 AAAACCCCTGGCCACTTTAAAAGAAAGAAAAACGCTACCTTCAGATATTTGGTCATAA 2094
Db 2041 AAAACCCCTGGCCACTTTAAAAGAAAGAAAAACGCTACCTTCAGATATTTGGTCATAA 2097
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RESULT 10
US-11-119-096-41
; Sequence 41, Application US/11119096
; Publication No. US20050191701a1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
```

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; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-41
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Query Match 99.3%; Score 2079.4; DB 26; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;
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Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Qy 61 GAAATGTGTGAGCAAGCTGTGTACATGGAATTTTCGACAGATCTTCACTGATTAGTAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTACATGGAATTTTCGACAGATCTTCACTGATTAGTAA 120
Qy 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTTGTTCTTACACAG 180
Db 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTTGTTCTTACACAG 180
Qy 181 GGCACCGGAGACCCACCGCACAGCCGCAAGTTTGTTAAGGAAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCGCACAGCCGCAAGTTTGTTAAGGAAATACAGAACCAACA 240
Qy 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTCTCGGTCTCGGTGATTAGAA 300
Db 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTCTCGGTCTCGGTGATTAGAA 300
Qy 301 TACACCTACTTTTGCATATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Qy 361 CGGCATTTCTATGACACTGGACATGCGATCCTGTAGGTTTAGAACTTGTGGTTGAG 420
Db 361 CGGCATTTCTATGACACTGGACATGCGATCCTGTAGGTTTAGAACTTGTGGTTGAG 420
Qy 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGACAA 480
Db 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGACAA 480
Qy 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGCAATCTTGGAGCAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGCAATCTTGGAGCAGACCTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTGAGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTGAGA 600
Qy 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAATGTGTA 660
Db 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAATGTGTA 660
Qy 661 ATTGAAGACTTTGAGTCTCTACTTACCGGTTCCGTAACCCCACTCTCACAAGCCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTACTTACCGGTTCCGTAACCCCACTCTCACAAGCCTCTCTG 720
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QY 721 AATATTCCTGGTTTACCCCAAGATATTTTACAGGTACATCTGCGAGAGTCTCTTTGGCCAG 780
Db 721 AATATTCCTGGTTTACCCCAAGATATTTTACAGGTACATCTGCGAGAGTCTCTTTGGCCAG 780
QY 781 GAGGAAAGCAGATATCTGACATTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAAG 840
Db 781 GAGGAAAGCAGATATCTGACATTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTCGACATT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTCGACATT 900
QY 901 TCAATACAGACTTTTCTATACAGCTCGAGATGCTTTCAGGATGATCTGCCCTAAACAGT 960
Db 901 TCAATACAGACTTTTCTATACAGCTCGAGATGCTTTCAGGATGATCTGCCCTAAACAGT 960
QY 961 GATTCGAGGTACAAAGCCTACTCCAAAGACTGACGCTTTGAAGATAAAAGAGAGACACTGC 1020
Db 961 GATTCGAGGTACAAAGCCTACTCCAAAGACTGACGCTTTGAAGATAAAAGAGAGACACTGC 1020
QY 1021 GTCCCTTTTGAATAAAGCGACACAAAGAAAGAGGAGCTACCTTACCCCGACATATA 1080
Db 1021 GTCCCTTTTGAATAAAGCGACACAAAGAAAGAGGAGCTACCTTACCCCGACATATA 1080
QY 1081 CTGCGGATGTTCTCTCAGTTTCATTTTACCTGCTGCTTGAATCCGAGCAATTCCT 1140
Db 1081 CTGCGGATGTTCTCTCAGTTTCATTTTACCTGCTGCTTGAATCCGAGCAATTCCT 1140
QY 1141 AAAAGGCAATTTTGCAGGCTTGTGACATATACAGTACAGTGCCTGAAAGCGCAGG 1200
Db 1141 AAAAGGCAATTTTGCAGGCTTGTGACATATACAGTACAGTGCCTGAAAGCGCAGG 1200
QY 1201 CTACAGGAGCTGTGCAATTAACAGGGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGCAATTAACAGGGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC 1260
QY 1261 TGTGCTGCTTGTGGATCTCTCTCTGCTTCCCTTTCTTCCAGCCACCACTCAGTCTC 1320
Db 1261 TGTGCTGCTTGTGGATCTCTCTCTGCTTCCCTTTCTTCCAGCCACCACTCAGTCTC 1320
QY 1321 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTTGCTGCGAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTTGCTGCGAAGCTCAAGTTTA 1380
QY 1381 TTTTACCAGCAAGCTCCATTTTCTTCAACATTTGGAATTTCTGCTACTGCCACA 1440
Db 1381 TTTTACCAGCAAGCTCCATTTTCTTCAACATTTGGAATTTCTGCTACTGCCACA 1440
QY 1441 ACAGAGTTCTCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAAGTT 1500
Db 1441 ACAGAGTTCTCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAAGTT 1500
QY 1501 CTTACGCAACATACATGATCCCATGACAGCAGCGGAAAGCCCTGCTCCTAAGATA 1560
Db 1501 CTTACGCAACATACATGATCCCATGACAGCAGCGGAAAGCCCTGCTCCTAAGATA 1560
QY 1561 TCCATCTCTCTCGAAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCAATC 1620
Db 1561 TCCATCTCTCTCGAAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCAATC 1620
QY 1621 ATAATGTTGGGTCCAGGAAACCGGATACGCCCGTTTATTTGGGTTCTCAACATAGAGAG 1680
Db 1621 ATAATGTTGGGTCCAGGAAACCGGATACGCCCGTTTATTTGGGTTCTCAACATAGAGAG 1680
QY 1681 AAACTCCAGAACAAACCCAGATGGAATTTTGGAGCAATGTG---GTTTTTGGCTGC 1737
Db 1681 AAACTCCAGAACAAACCCAGATGGAATTTTGGAGCAATGTGTTTGTGTTTGGCTGC 1740
QY 1738 AGGCATAGGATAGGATTTATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1797
Db 1741 AGGCATAGGATAGGATTTATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
QY 1798 ATCTTAACTCATATAAGGTTTCTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGCC 1857

Db 1801 ATCTTAACTCATATAAGGTTTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGCC 1860
QY 1858 CCAGAAAGTATGTACAAAGCAACATCAGCTTCATGCGCAGCAGGTTGGCGAGATCCTC 1917
Db 1861 CCAGAAAGTATGTACAAAGCAACATCAGCTTCATGCGCAGCAGGTTGGCGAGATCCTC 1920
QY 1918 CTCAGAGAAAGCGCCATATTTATGTGTGGAGATGCAAGAAATATGCGCAAGATGTA 1977
Db 1921 CTCAGAGAAAGCGCCATATTTATGTGTGGAGATGCAAGAAATATGCGCAAGATGTA 1980
QY 1978 CATGATCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAGCAATG 2037
Db 1981 CATGATCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAGCAATG 2040
QY 2038 AAAACCTTGGCCACTTTTAAAGAGAAAGAAAGCGCTTACCTTCAGGATATTTGGTCATAA 2094
Db 2041 AAAACCTTGGCCACTTTTAAAGAGAAAGAAAGCGCTTACCTTCAGGATATTTGGTCATAA 2097

RESULT 11
US-11-119-096-43
; Sequence 43, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-43

Query Match 99.3%; Score 2079.4; DB 26; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;
QY 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGCAGGCAAGGCGCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGCAGGCAAGGCGCATCGCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
QY 121 TCCGATAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTTGTTGTTTCTACCCAG 180
Db 121 TCCGATAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTTGTTGTTTCTACCCAG 180
QY 181 GGCACCCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Db 181 GGCACCCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
QY 241 CTGCCGGTTGATTTTCTTGTCTCACCTCGGATGCGGTTACTGGGCTCTCGGTGATTGAGAA 300

Db	241	 CTCCGGTTGATTTCTTTTGTCTCACTTCGGGTATGGGTATTCTGGGTCTCGGTGATTTCAGAA	300
Qy	301	TACACCTACTCTTTTGCAAATGGGGGAAGATAAATTTGATATAAACGACTTCAAGAGCTTGGAGCC	360
Db	301	TACACCTACTCTTTTGCAAATGGGGGAAGATAAATTTGATATAAACGACTTCAAGAGCTTGGAGCC	360
Qy	361	CGGCATTTCTATGACACATCGACATGACATGACTGTGTAGGTTTAGAACTTGTGGTTGAG	420
Db	361	CGGCATTTCTATGACACATCGACATGACATGACTGTGTAGGTTTAGAACTTGTGGTTGAG	420
Qy	421	CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCACGACAGACAA	480
Db	421	CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCACGACAGACAA	480
Qy	481	GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCCTGTCATCCTTTGAGGACAGACCTTTGTG	540
Db	481	GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCCTGTCATCCTTTGAGGACAGACCTTTGTG	540
Qy	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Db	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Qy	601	AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGTCAGTGAACAGCAACCAATCCAATGTTGTA	660
Db	601	AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGTCAGTGAACAGCAACCAATCCAATGTTGTA	660
Qy	661	ATTGAAGACTTTGAGTGCTCACTTACCCGTTCCGTTACCCCACTCTCACAGGCTCTCTG	720
Db	661	ATTGAAGACTTTGAGTGCTCACTTACCCGTTCCGTTACCCCACTCTCACAGGCTCTCTG	720
Qy	721	AATATTCTCGTTTTACCCCCAGAAATATTTACAGTATCATCTGCAGGAGTCTCTTGCCAG	780
Db	721	AATATTCTCGTTTTACCCCCAGAAATATTTACAGTATCATCTGCAGGAGTCTCTTGCCAG	780
Qy	781	GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG	840
Db	781	GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG	840
Qy	841	GCAGTTCAACTTACTAGCAATGATGCCATAAAACCACCTCTGCTGGTAGNAATTTGGACATT	900
Db	841	GCAGTTCAACTTACTAGCAATGATGCCATAAAACCACCTCTGCTGGTAGNAATTTGGACATT	900
Qy	901	TCAAATACAGACTTTTCCATTACGCTGGAGATGCCCTTCAGCGTGATCTGCCCTAACGT	960
Db	901	TCAAATACAGACTTTTCCATTACGCTGGAGATGCCCTTCAGCGTGATCTGCCCTAACGT	960
Qy	961	GATTTCTGAGGTACAAAGCCTACTCCTCAAGACTGCAGCTTGAAGATAAAGAGAGCACTGC	1020
Db	961	GATTTCTGAGGTACAAAGCCTACTCCTCAAGACTGCAGCTTGAAGATAAAGAGAGCACTGC	1020
Qy	1021	GTCCCTTTGAAATAAAGGCAGACACAAAGAAAGGAGGACTACCTTACCCTCCAGCATATA	1080
Db	1021	GTCCCTTTGAAATAAAGGCAGACACAAAGAAAGGAGGACTACCTTACCCTCCAGCATATA	1080
Qy	1081	CTGCGGGATGTTCTCTCCAGTTTCATTTTTACCTGGTGCTCTGAAATCCGAGCAATTCCT	1140
Db	1081	CTGCGGGATGTTCTCTCCAGTTTCATTTTTACCTGGTGCTCTGAAATCCGAGCAATTCCT	1140
Qy	1141	AAAAAGGCATTTTTGCGAGCCCTTGTGCACTATACCAAGTGAACAGGAGGACTACCTTACCCAGCATATA	1200
Db	1141	AAAAAGGCATTTTTGCGAGCCCTTGTGCACTATACCAAGTGAACAGGAGGACTACCTTACCCAGCATATA	1200
Qy	1201	CTACAGAGCTGTGCGATGAACAAAGGGGACGCCGATTAATACCGCTTTGTACGAGATGCC	1260
Db	1201	CTACAGAGCTGTGCGATGAACAAAGGGGACGCCGATTAATACCGCTTTGTACGAGATGCC	1260
Qy	1261	TGTGCCCTGCTTGTGTTGATCTCCTCCTCGCTTTCCCTTTCTGCGAGCCACCACTCAGTCTC	1320
Db	1361	TGTGCCCTGCTTGTGTTGATCTCCTCCTCGCTTTCCCTTTCTGCGAGCCACCACTCAGTCTC	1320
Qy	1321	CTGCTCGAAACATCTTCTCTAACTTTCAACCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380

Query Match	99.0%;	Score 2072.6;	DB 22;	Length 3256;
Best Local Similarity	98.9%;	Pred. No. 0;		
Matches 2073;	Conservative	21;	Mismatches	0;
			Indels	3;

QY 1 ATGAGGAGTTTCTGTTACTATATCTACACAGCAGGACAGGCAAAAGGCCATCCAGAA 60
Db 94 ATGAGGAGTTTCTGTTACTATATCTACACAGCAGGACAGGCAAAAGGCCATCCAGAA 153
QY 61 GAAATGTCGAGCAGCTGTGTATCATGATTTCTGCAGATCTTCACTGATTTAGTGA 120
Db 154 GAAATGTCGAGCAGCTGTGTATCATGATTTCTGCAGATCTTCACTGATTTAGTGA 213
QY 121 TCCGATAAGTATGACTTAAACCGAAACAGCTCTCTGTTGTTGTTGTTTACACAG 180
Db 214 TCCGATAAGTATGACTTAAACCGAAACAGCTCTCTGTTGTTGTTGTTTACACAG 273
QY 181 GGCACCGAGACCCACCGACACACGCGCGAAGTTGTTAAGGAATACAGAACCAACA 240
Db 274 GGCACCGAGACCCACCGACACACGCGCGAAGTTGTTAAGGAATACAGAACCAACA 333
QY 241 CTGCGGTTGATTTCTGTTGCTACCTGCGGTATGCGTTACTGCGGTCTCGGTGATTCAGAA 300
Db 334 CTGCGGTTGATTTCTGTTGCTACCTGCGGTATGCGTTACTGCGGTCTCGGTGATTCAGAA 393
QY 301 TACACTACTTTTGCATGGGGGAAGATATTTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 394 TACACTACTTTTGCATGGGGGAAGATATTTGATAAAGACTTCAAGAGCTTGGAGCC 453
QY 361 CGGCATTTCTATGACACTGGACATGCGATGACTGTGTAGTTTGAACCTTGTGTTGAG 420
Db 454 CGGCATTTCTATGACACTGGACATGCGATGACTGTGTAGTTTGAACCTTGTGTTGAG 513
QY 421 CCGTGATTTGCTGACTTGGCCAGCCTCGAGAGCAATTTAGTCAAGCAGAGGACAA 480
Db 514 CCGTGATTTGCTGACTTGGCCAGCCTCGAGAGCAATTTAGTCAAGCAGAGGACAA 573
QY 481 GAGGAGTAAGTGGCGCACTCCCGTGGCATCACCTGCATCTTCAAGCAGAGCCTCTGTG 540
Db 574 GAGGAGTAAGTGGCGCACTCCCGTGGCATCACCTGCATCTTCAAGCAGAGCCTCTGTG 633
QY 541 AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 600
Db 634 AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 693
QY 601 AGAAGGATTTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATTTGTA 660
Db 694 AGAAGGATTTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATTTGTA 753
QY 661 ATTGAAGACTTTGAGTCTCACTTACCGTTGCGTACCCCACTCTCAAGCCTCTCTG 720
Db 754 ATTGAAGACTTTGAGTCTCACTTACCGTTGCGTACCCCACTCTCAAGCCTCTCTG 813
QY 721 AATATTCCTGTTTACCCCAAGATTTTACAGGTACATCTGCGAGGCTCTCTTGGCCAG 780
Db 814 AATATTCCTGTTTACCCCAAGATTTTACAGGTACATCTGCGAGGCTCTCTTGGCCAG 873
QY 781 GAGGAAGCCAGATATCTGACTTCAAGCAGATCCAGTTTTCAGTGCCTTCAAG 840
Db 874 GAGGAAGCCAGATATCTGACTTCAAGCAGATCCAGTTTTCAGTGCCTTCAAG 933
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAACCACTCTGCTGTAGAAATTTGACATT 900
Db 934 GCAGTTCAACTTACTACGAATGATGCCATAAACCACTCTGCTGTAGAAATTTGACATT 993
QY 901 TCAATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGCGTATCTGCCCTAACAGT 960
Db 994 TCAATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGCGTATCTGCCCTAACAGT 1053
QY 961 GATTCAGGTTACAAAGCCTACTCCAAAGCTGAGCTTGAAGTAAAGAGAGCAGCTGC 1020
Db 1054 GATTCAGGTTACAAAGCCTACTCCAAAGCTGAGCTTGAAGTAAAGAGAGCAGCTGC 1113
QY 1021 GTCCCTTTGAAATAAAGCGACACAAAGAGAGAGGCTTACCTTACCCAGCATATA 1080
Db 1114 GTCCCTTTGAAATAAAGCGACACAAAGAGAGAGGCTTACCTTACCCAGCATATA 1173

QY 1081 CCTCGGGAATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTTGAAATCCGAGCAATTCCT 1140
Db 1174 CCTCGGGAATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTTGAAATCCGAGCAATTCCT 1233
QY 1141 AAAAAGGCATTTTGGAGCCCTTGTGACATATACCACTGACAGTGTCTGAAAGCGCAGG 1200
Db 1234 AAAAAGGCATTTTGGAGCCCTTGTGACATATACCACTGACAGTGTCTGAAAGCGCAGG 1293
QY 1201 CTACAGGAGCTGTGCAGTAAACAAAGGGGCGCCGATATATAGCCGCTTTGTACGAGATGCC 1260
Db 1294 CTACAGGAGCTGTGCAGTAAACAAAGGGGCGCCGATATATAGCYGCTTTGTACGAGATGCC 1353
QY 1261 TGTGCTGCTGTTGGATCTCTCTCTGCTTCCCTTCTGCGAGGCACTCACTGATCTC 1320
Db 1354 TGTGCTGCTGTTGGATCTCTCTCTGCTTCCCTTCTGCGAGCCCACTCACTGATCTC 1413
QY 1321 CTGCTCGAAACATCTTCTTAACTTCAACCCAGACATATCTGCTGCAAGCTCAAGTTTA 1380
Db 1414 CTGCTCGAAACATCTTCTTAACTTCAACCCAGACATATCTGCTGCAAGCTCAAGTTTA 1473
QY 1381 TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1474 TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1533
QY 1441 ACAGAGTTCTGCGAAGGAGTATGACAGGCTGGCTGGCTTGTGGTTCAGTT 1500
Db 1534 ACAGAGTTCTGCGAAGGAGTATGACAGGCTGGCTGGCTTGTGGTTCAGTT 1593
QY 1501 CTTCAGCCAAACATACATGCAATCCATGAACAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
Db 1594 CTTCAGCCAAACATACATGCAATCCATGAACAGAGTGGAAAGCCCTGGCTCTTAAGATA 1653
QY 1561 TCCATCTCTCTCGAAACAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCAATC 1620
Db 1654 TCCATCTCTCTCGAAACAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCAATC 1713
QY 1621 ATATATGTTGGTTCAGGAACCGGCATAGCCCGCTTATTTGGGTTCTTACAAATAGAG 1680
Db 1714 ATATATGTTGGTTCAGGAACCGGCATAGCCCGCTTATTTGGGTTCTTACAAATAGAG 1773
QY 1681 AAATCCCAAGAACCAACACCCAGATGGAATTTTCGAGCAATGTG--GTTTTTGGCTGC 1737
Db 1774 AAATCCCAAGAACCAACACCCAGATGGAATTTTCGAGCAATGTGTTGTTTGGCTGC 1833
QY 1738 AGGATTAAGGATAGGATATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1797
Db 1834 AGGATTAAGGATAGGATATCTATTCAGAAAGAGCTCAGATATTTCTTAAAGCATGG 1893
QY 1798 ATCTTAATCTCACTAAAGTTTCTCTCAAGAGATGCTCTGTTGGGAGAGGAGGCC 1857
Db 1894 ATCTTAATCTCACTAAAGTTTCTCTCAAGAGATGCTCTGTTGGGAGAGGAGGCC 1953
QY 1858 CCAGCAAGTATGTACAGAACCAACATCCAGCTTCCATGSCCAGAGGTTGGCAGATCCTC 1917
Db 1954 CCAGCAAGTATGTACAGAACCAACATCCAGCTTCCATGSCCAGAGGTTGGCAGATCCTC 2013
QY 1918 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGATATATGSCCAAGGATGTA 1977
Db 2014 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGATATATGSCCAAGGATGTA 2073
QY 1978 CATGATCCCTTGTGCAAAATTAAGCAAGAGGTTGGAGTTGAAAACTAAGAGCAATG 2037
Db 2074 CATGATCCCTTGTGCAAAATTAAGCAAGAGGTTGGAGTTGAAAACTAAGAGCAATG 2133
QY 2038 AAAACCCCTGGCCACTTTTAAAGAGAAACCGCTTACCTTCAGGATATTTGCTCATAA 2094
Db 2134 AAAACCCCTGGCCACTTTTAAAGAGAAACCGCTTACCTTCAGGATATTTGCTCATAA 2190

RESULT 13

US-10-741-600-693

; Sequence 693, Application US/10741600

; Publication No. US20050026169A1

```

; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 693
; LENGTH: 3274
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-741-600-693

```

Query Match 99.0%; Score 2072.6; DB 22; Length 3274;
Best Local Similarity 98.9%; Pred. No. 0;
Matches 2073; Conservative 21; Mismatches 0; Indels 3; Gaps 1;

Qy	1	ATGAGGAGGTTTCTGTGTTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCGAA	60
Db	112	ATGAGGAGGTTTCTGTGTTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATTCGCGAA	171
Qy	61	GAATGCTGTAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTCAA	120
Db	172	GAATATRTGTAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTCAA	231
Qy	121	TCCGATAAGTATGACCTAAAAACCGAAACAGCTCCTCTTGTGTGTGTGGTTTCTTACCACG	180
Db	232	TCCGATTAAGTATGACCTAAAAACCGAAACAGCTCCTCTTGTGTGTGTGGTTTCTTACCACG	291
Qy	181	GGCACCGGAGACCCACCGGACACAGCCGCGCAAGTTTGTAAAGSAAATACAGAACCAAAACA	240
Db	292	GGCACCGGAGACCCACCGGACACAGCCGCGCAAGTTTGTAAAGSAAATACAGAACCAAAACA	351
Qy	241	CTGCGGTTGATTTCTTTTGCTCACTGCGGATGCGGTACTTGGGTCTCGGTTGATTCAGAA	300
Db	352	CTGCGGTTGATTTCTTTTGCTCACTGCGGATGCGGTACTTGGGTCTGCGGTTGATTCAGAA	411
Qy	301	TACACCTACTTTTGCATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTTGGAGCC	360
Db	412	TACACCTACTTTTGCATGGGGGGAAGATAATTGATAAAGACTTCAAGAGCTTTGGAGCC	471
Qy	361	CGGCATTTCTATGACACTGGACATCGAGATCACTGTGTAGGTTTAGAACTTTGTGTTGAG	420
Db	472	CGGCATTTCTATGACACTGGACATTCAGATCACTGTGTAGGTTTAGAACTTTGTGTTGAG	531
Qy	421	CCGTGGATTTGTGACTCTGCGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA	480
Db	532	CCGTGGATTTGTGACTCTGCGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA	591
Qy	481	GAGGATTAAGTGGCGACTCCCGTGGCATCACCTGCATCCTTGAGGACAGACCTTGCTG	540
Db	592	GAGGATTAAGTGGCGACTCCCGTGGCATCACCTGCATCCTTGAGGACAGACCTTGCTG	651
Qy	541	AAGTCAAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Db	652	AAGTCAAGCTGTCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	711
Qy	601	AGAAAGGATTCGAGGTTTGAAGCAAAATCAGGTGAAACAGCAACCAATCCAAATGTTGTA	660
Db	712	AGAAAGGATTCGAGGTTTGAAGCAAAATCAGGTGAAACAGCAACCAATCCAAATGTTGTA	771
Qy	661	ATTGAAGACTTTGAGTCTCTCACTTACCGTTCCGTACCCCCACTCTCAAGAGCCTCTCTG	720
Db	772	ATTGAAGACTTTGAGTCTCTCACTTACCGTTCCGTACCCCCACTCTCAAGAGCCTCTCTG	831
Qy	721	AATATTCCTGTTTACCCCCAGAAATATTTACAGGTACATCTGCGAGGAGTCTCTTGGCCAG	780
Db	832	AATATTCCTGTTTACCCCCAGAAATATTTACAGGTACATCTGCGAGGAGTCTCTTGGCCAG	891
Qy	781	GAGGAAAGCCAAAGTATCTGTCACTTCAGCAGATCCAGTTTTTTCAGTGCCCAATTTCAAAG	840

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QY 1918 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGCGCAAGATGTA 1977
Db 2032 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGCGCAAGATGTA 2091
QY 1978 CATGATGCCCTGTGCAATANTAGCAAGAGGTTGGAGTTGAAAGAACTAGAACGAATG 2037
Db 2092 CATGATGCCCTGTGCAATANTAGCAAGAGGTTGGAGTTGAAAGAACTAGAACGAATG 2151
QY 2038 AAAACCCCTGGCCACTTTAAAGAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2094
Db 2152 AAAACCCCTGGCCACTTTAAAGAGAGAAAGCGTACCTTCAGGATATTTGGTCATAA 2208

RESULT 14
US-09-371-347-47
; Sequence 47, Application US/09171347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/002003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-47

Query Match 98.5%; Score 2063; DB 10; Length 2093;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 2090; Conservative 0; Mismatches 0; Indels 7; Gaps 2;

QY 1 ATGAGGAGGTTTCTGTTACTATATCTACACAGCAGGACAGGCAAGGCGCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTTACTATATCTACACAGCAGGACAGGCAAGGCGCATCGCAGAA 60
QY 61 GAATGTCTGAGCAGCTGTGTACATCGATTTCTGACAGATCTTCACTGTATTAGTGAA 120
Db 61 GAATGTCTGAGCAGCTGTGTACATCGATTTCTGACAGATCTTCACTGTATTAGTGAA 120
QY 121 TCCGATAAGTATGACCTAAAACCGAAACAGCTCTCTTGTGTGTGTGTCTTACCACG 180
Db 121 TCCGATAAGTATGACCTAAAACCGAAACAGCTCTCTTGTGTGTGTGTCTTACCACG 180
QY 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
QY 241 CTGCGGTTGATTTCTTCTGCTACCTCGGATATGAGTTACTGGGCTCGGTGATTCAGAA 300
Db 241 CTGCGGTTGATTTCTTCTGCTACCTCGGATATGAGTTACTGGGCTCGGTGATTCAGAA 300
QY 301 TACACCTACTTTTGCATGGGGGGAAGATATTTGATAAAGCACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATGGGGGGAAGATATTTGATAAAGCACTTCAAGAGCTTGGAGCC 360
QY 361 CGGCATTTCTATGACACTGGACATGACATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420
Db 361 CGGCATTTCTATGACACTGGACATGACATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420
QY 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
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QY 481 GAGGAGATAAGTGGCGCATCTCCGGTGGCATCACCTGTCATCTTTGAGGACAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCATCTCCGGTGGCATCACCTGTCATCTTTGAGGACAGACCTTGTG 540
QY 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGA 600
Db 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGA 600
QY 601 AGAAAGGATTCGTAGGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCAATGTTGTA 660
Db 601 AGAAAGGATTCGTAGGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCAATGTTGTA 660
QY 661 ATTGAAGACTTTTGTAGTCTCTACCTTACCCGTTCCGTTACCCCACTCTCAAGACCTCTCTG 720
Db 661 ATTGAAGACTTTTGTAGTCTCTACCTTACCCGTTCCGTTACCCCACTCTCAAGACCTCTCTG 720
QY 721 AATATTCCTGTTTACCCCGAATATTTACAGGTACATCTGCGAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCGAATATTTACAGGTACATCTGCGAGGAGTCTCTTGGCCAG 780
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Db 781 GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTCCCAATTTCAAAG 840
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Db 1021 GTCTTTTGAATAAAGGCGACACAAAGAAAGAGGAGCTACTTACCCCGACATATA 1080
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QY 1201 CTACAGGAGCTGTGCAGTAAACAAAGGGGCGAGCGGATTTATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGCAGTAAACAAAGGGGCGAGCGGATTTATAGCCGCTTTGTACGAGATGCC 1260
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Db 1261 TGTGCTGCTGTTGGATCTCTCTGCTTCCCTTCTTCCGAGCAGCAGCTCAGTCTC 1320
QY 1321 CTGCTCGAAACATCTTCTTAAACTTTCAACCCAGACATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAAACATCTTCTTAAACTTTCAACCCAGACATATTCGTGTGCAAGCTCAAGTTTA 1380
QY 1381 TTTCAACCCAGGAAAGCTTCCATTTTGTCTTCAACATTTGTGGAATTTCTGCTACTGCCACA 1440
Db 1381 TTTCAACCCAGGAAAGCTTCCATTTTGTCTTCAACATTTGTGGAATTTCTGCTACTGCCACA 1440
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Db 1441 ACAGAGTTCTGCGGAAGGAGTATGTACAGCTGGCTGGCTTGTGGTGTCTTCAGTT 1500
QY 1501 CTTCAAGCAACATACATGTCATCCCATGAAGAGCGGGAAGCCCTCGGCTCTTAAGATA 1560
Db 1501 CTTCAAGCAACATACATGTCATCCCATGAAGAGCGGGAAGCCCTCGGCTCTTAAGATA 1560
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Db	1621	ATAATGTGGTCCAGGAACCGGCATAGCCCGTTTATTGGTTCCTACACAT	1676
Qy	1681	AAATCTCAAGAACCAACCCAGATGGAAATTTTGGAGCAATGTG---	1737
Db	1677	AAATCTCAAGAACCAACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC	1736
Qy	1738	AGGCATAAGGATAGGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAGCATGGG	1797
Db	1737	AGGCATAAGGATAGGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTTAAGCATGGG	1796
Qy	1798	ATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCTGTGGGAGGAGGAAGCC	1857
Db	1797	ATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCTGTGGGAGGAGGAAGCC	1856
Qy	1858	CCAGCAAGTATGTATCAAGACAAACATCCAGCTTCATGSCCAGCAGGTGGCGAGATCCTC	1917
Db	1857	CCAGCAAGTATGTATCAAGACAAACATCCAGCTTCATGSCCAGCAGGTGGCGAGATCCTC	1916
Qy	1918	CTCCAGGAGAACGGCCATATTTATGTGTGTGGAGATCAAAAGATATGGCCAAAGGATGTA	1977
Db	1917	CTCCAGGAGAACGGCCATATTTATGTGTGTGGAGATCAAAAGATATGGCCAAAGGATGTA	1976
Qy	1978	CATGATGCCCTTGTGCATAATTAATGAACAAAGAGTTGGAGTTGAAAACTAGAGCAATG	2037
Db	1977	CATGATGCCCTTGTGCATAATTAATGAACAAAGAGTTGGAGTTGAAAACTAGAGCAATG	2036
Qy	2038	AAAACCTTGGCCACTTTTAAAGAGAAAAACGCTACCTTCAGGATATTTTGGTCATAA	2094
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RESULT 15

US-11-119-096-47

Sequence 47, Application US/11119096

Publication No. US20050191701A1

GENERAL INFORMATION:

APPLICANT: Gravel, Roy A,

APPLICANT: Rozen, Rima

APPLICANT: Leclerc, Daniel

APPLICANT: Wilson, Aaron

APPLICANT: Rosenblatt, David

TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:

TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE

TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME

FILE REFERENCE: 50004/003005

CURRENT APPLICATION NUMBER: US/11/119,096

CURRENT FILING DATE: 2005-04-29

PRIOR APPLICATION NUMBER: 09/487,841

PRIOR FILING DATE: 2000-01-19

PRIOR APPLICATION NUMBER: 09/371,347

PRIOR FILING DATE: 1999-08-10

PRIOR APPLICATION NUMBER: 09/232,028

PRIOR FILING DATE: 1999-01-15

PRIOR APPLICATION NUMBER: 60/071,622

PRIOR FILING DATE: 1998-01-16

NUMBER OF SEQ ID NOS: 63

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 47

LENGTH: 2093

TYPE: DNA

ORGANISM: Homo sapiens

US-11-119-096-47

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 15:42:02 ; Search time 235.308 Seconds
(without alignments)
14554.251 Million cell updates/sec

Title: US-09-371-347A-47

Perfect score: 2093

Sequence: 1 atgagggggtttctgttact.....ttcaggatatttggtcataa 2093

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued_Patents_NA.*

- 1: /cgn2_6/ptodata/1/ina/5A_COMB.seq.*
- 2: /cgn2_6/ptodata/1/ina/5B_COMB.seq.*
- 3: /cgn2_6/ptodata/1/ina/6A_COMB.seq.*
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- 5: /cgn2_6/ptodata/1/ina/PTUS_COMB.seq.*
- 6: /cgn2_6/ptodata/1/ina/backfiles.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2079	99.3	3259	3	US-09-318-448-23
2	2074.2	99.1	3242	4	US-09-949-016-4215
3	386.4	18.5	390	3	US-08-905-223-71
4	380.6	18.2	601	4	US-09-949-016-150019
5	379.4	18.1	35916	4	US-09-949-016-15957
6	379	18.1	601	4	US-09-949-016-150020
7	190.4	9.1	601	4	US-09-949-016-150037
8	188.8	9.0	601	4	US-09-949-016-150047
9	187.2	8.9	601	4	US-09-949-016-150046
10	186.4	8.9	601	4	US-09-949-016-150046
11	174.4	8.3	2475	4	US-09-566-921-88
12	155.2	7.4	601	4	US-09-949-016-150030
13	154.8	7.4	601	4	US-09-949-016-150031
14	130.8	6.2	244	4	US-09-471-276-495
15	128.6	6.1	601	4	US-09-949-016-150007
16	126.2	6.0	601	4	US-09-949-016-150029
17	123.4	5.9	601	4	US-09-949-016-150008
18	123.4	5.9	601	4	US-09-949-016-150055
19	121.4	5.8	601	4	US-09-949-016-150041
20	121.4	5.8	601	4	US-09-949-016-150042
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22	76	3.6	601	4	US-09-949-016-150018
23	64.6	3.1	4353	2	US-08-365-486A-18
24	64.6	3.1	4353	2	US-08-880-342-18
25	64.6	3.1	4780	2	US-08-365-486A-20
26	64.6	3.1	4780	3	US-09-123-708-3
27	64.6	3.1	4780	3	US-09-123-624-3

28	64.6	3.1	4780	3	US-08-880-342-20	Sequence 20, Appl
29	59.8	2.9	5057	2	US-08-365-486A-12	Sequence 12, Appl
30	59.8	2.9	5057	3	US-08-880-342-12	Sequence 12, Appl
31	59.8	2.9	5108	1	US-07-642-002-1	Sequence 1, Appl
32	58.6	2.8	4079	4	US-09-016-434-1477	Sequence 1477, A
33	57.8	2.8	1292	4	US-09-270-767-10272	Sequence 10272, A
34	56	2.7	1863	3	US-09-627-216A-13	Sequence 13, Appl
35	55.6	2.7	1863	4	US-09-765-873A-13	Sequence 1226, Ap
36	55.6	2.7	2403	4	US-09-023-655-1226	Sequence 1226, Ap
37	55.2	2.6	1890	3	US-09-134-001C-1557	Sequence 1557, Ap
38	55	2.6	3155	4	US-09-710-279-3424	Sequence 3424, Ap
39	55	2.6	4055	4	US-09-710-279-3357	Sequence 3357, Ap
40	53.6	2.6	1887	4	US-09-710-279-2843	Sequence 2843, Ap
41	52.8	2.5	13508	4	US-08-956-171E-120	Sequence 120, App
42	52.8	2.5	13508	4	US-08-781-986A-120	Sequence 120, App
43	50.2	2.4	1448	3	US-08-936-165A-113	Sequence 113, App
44	49.2	2.4	1929	4	US-09-543-681A-2997	Sequence 2997, Ap
45	48.4	2.3	3037	4	US-09-911-781-10	Sequence 10, Appl

ALIGNMENTS

RESULT 1

US-09-318-448-23
; Sequence 23, Application US/09318448
; Patent No. 6210950

GENERAL INFORMATION:

APPLICANT: Johnson, William G.

APPLICANT: Stenroos, Edward S.

TITLE OF INVENTION: METHODS FOR DIAGNOSING, PREVENTING, AND TREATING

FILE REFERENCE: 601-1-057

CURRENT APPLICATION NUMBER: US/09/318,448

CURRENT FILING DATE: 1999-05-25

NUMBER OF SEQ ID NOS: 46

SOFTWARE: Patent In Ver. 2.0

SEQ ID NO 23

LENGTH: 3259

TYPE: DNA

ORGANISM: Homo sapiens

US-09-318-448-23

Query Match	99.3%	Score 2079;	DB 3;	Length 3259;
Best Local Similarity	99.8%	Pred. No. 0;		
Matches 2093;	Conservative	0;	Mismatches	0;
			Indels	4;
			Gaps	1;
Qy	1	ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGGCCATCGAGAA	60	
Db	80	ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGGCCATCGAGAA	139	
Qy	61	GAATGTGTCAGCAAGCTGTGTACATGGATTTTCTCAGATCTTCACTGTATTAGTGA	120	
Db	140	GAATGTGTCAGCAAGCTGTGTACATGGATTTTCTCAGATCTTCACTGTATTAGTGA	199	
Qy	121	TCCGATAAGTATGACCTTAAACCGAAACAGCTCTCTTGTGTGTGTGTCTTACCACG	180	
Db	200	TCCGATAAGTATGACCTTAAACCGAAACAGCTCTCTTGTGTGTGTGTCTTACCACG	259	
Qy	181	GGCACCAGGACCCACCCGACAGCCCGCAAGTTTCTTAAAGAAATACAGAACCAACA	240	
Db	260	GGCACCAGGACCCACCCGACAGCCCGCAAGTTTCTTAAAGAAATACAGAACCAACA	319	
Qy	241	CTCCGGTTCATTTCTTGTCTACCTGCGGTATGGGTACTGGTCTCGGTGATTGAA	300	
Db	320	CTCCGGTTCATTTCTTGTCTACCTGCGGTATGGGTACTGGTCTCGGTGATTGAA	379	
Qy	301	TACACCTACTTTTGCATGGGGGAGATAATGATAACGACTTCAAGAGCTTGGAGCC	360	
Db	380	TACACCTACTTTTGCATGGGGGAGATAATGATAACGACTTCAAGAGCTTGGAGCC	439	
Qy	361	CGGCAATTTATGACACTGACATGACATGCTGTAGTTTAGAATCTGTGTGTGAG	420	

440 CGGCAATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTGAACATTTGTTGGT 499
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500 CCCTGGATTGCTGACACTCTGCGACAGCCCTCAGAAGCATTTTAGGTCAGCAGAGGACAA 559
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560 GAGGAGATAGTGGGCGACTCCCGGTGGCATCACTGCATCTCTTGGAGACAGACTTTGTG 619
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620 AAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
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1561 TCCATCTCTCCTCGAACAACAAATTTCTTCCATCTTACAGATGACCCCTCAATCCCATC 1620
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1621 ATATGTTGGTTCAGGAAACCGGATAGCCCGTTTATTTGGTTCCTTACAAACAT----AG 1676
1700 ATATGTTGGTTCAGGAAACCGGATAGCCCGTTTATTTGGTTCCTTACAAACATAGAG 1759
1677 AAATCTCAAGAAACAAACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1736
1760 AAATCTCAAGAAACAAACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
1737 AGCATTAAGGATAGGGAATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAGCATGG 1796
1820 AGCATTAAGGATAGGGAATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAGCATGG 1879
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1857 CCAGCAAGTATGTACAAAGCAACATCCAGCTTCATCGCCAGCAGGTGGCGAGATCCTC 1916
1940 CCAGCAAGTATGTACAAAGCAACATCCAGCTTCATCGCCAGCAGGTGGCGAGATCCTC 1999
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2000 CTCAGGAGAAACGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 2059
1977 CATGATCCCTTGTGCAAAATAAAGCAAGAGTTTGAGTTGAAAACTAGAAGCAATG 2036
2060 CATGATCCCTTGTGCAAAATAAAGCAAGAGTTTGAGTTGAAAACTAGAAGCAATG 2119
2037 AAAACCCCTGGCCACTTTTAAAGAAAGAAACCGCTTACCTTCAGGATATTTGGTCAATA 2093
2120 AAAACCCCTGGCCACTTTTAAAGAAAGAAACCGCTTACCTTCAGGATATTTGGTCAATA 2176

RESULT 2

US-09-949-016-4215
; Sequence 4215, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4215
; LENGTH: 3242
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4215

Query Match 99.1%; Score 2074.2; DB 4; Length 3242;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 2090; Conservative 0; Mismatches 3; Indels 4; Gaps 1;
QY 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGCAAGGCAATCGCAGAA 60
|||||

APPLICANT: Lacroix, Bruno
TITLE OF INVENTION: 5' ESTS FOR SECRETED PROTEINS
NUMBER OF SEQUENCES: 503
CORRESPONDENCE ADDRESS:

ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 501 West Broadway
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-3505

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy Disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Win95
SOFTWARE: Word

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/905,223
FILING DATE:

CLASSIFICATION: 536

ATTORNEY/AGENT INFORMATION:

NAME: Israelson, Ned A.

REGISTRATION NUMBER: 29,655

REFERENCE/DOCKET NUMBER:

TELECOMMUNICATION INFORMATION:

TELEPHONE: (619) 235-8550

TELEFAX: (619) 235-0176

INFORMATION FOR SEQ ID NO: 71:

SEQUENCE CHARACTERISTICS:

LENGTH: 390 base pairs

TYPE: NUCLEIC ACID

STRANDEDNESS: DOUBLE

TOPOLOGY: LINEAR

MOLECULE TYPE: CDNA

ORIGINAL SOURCE:

ORGANISM: Homo Sapiens

TISSUE TYPE: Brain

FEATURE:

NAME/KEY: sig_peptide

LOCATION: 289..357

IDENTIFICATION METHOD: Von Heijne matrix

OTHER INFORMATION: score 6.9

OTHER INFORMATION: seq SL5LLASHSVSC/SN

US-08-905-223-71

Query Match 18.5%; Score 386.4; DB 3; Length 390;
Best Local Similarity 99.7%; Pred. No. 1.7e-120;
Matches 387; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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DB 1 AAGTACAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACTGCGTCCTTT 60
QY 1028 TGAATAAAGGAGACACAAAGAGAAAGAGAGCTACCTTACCCAGCATATACCTGCGG 1087
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DB 121 GATGTTCTCTCAGTTCATTTTACCTGGTGTCTTGAATCCGAGCAATTCCTAAAGG 180
QY 1148 CATTTTTCGAGCCCTTGTGACTATACAGTGACAGTCTGAAAGCGCAGGCTACAGG 1207
DB 181 CATTTTTCGAGCCCTTGTGACTATACAGTGACAGTCTGAAAGCGCAGGCTACAGG 240
QY 1208 AGCTGTGAGTAAACAAAGGGCAGCCGATTTAGCCGCTTTGTACGAGATGCTGTGCT 1267
DB 241 AGCTGTGAGTAAACAAAGGGCAGCCGATTTAGCCGCTTTGTACGAGATGCTGTGCT 300
QY 1268 GCTTGTGAGTCTCTCTCGTCTTCCCTTCTTGCAGCCACCACTCAGTCTCCTGCTCG 1327
DB 301 GCTTGTGAGTCTCTCTCGTCTTCCCTTCTTGCAGCCACCACTCAGTCTCCTGCTCG 360
QY 1328 AACATCTTCTCTAAACTTCAACCCAGACC 1355

Db 361 AACATCTTCTCTAAACTTCAACCCAGACC 388

RESULT 4

US-09-949-016-150019
Sequence 150019, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 150019
LENGTH: 601
TYPE: DNA
ORGANISM: Human
US-09-949-016-150019

Query Match 18.2%; Score 380.6; DB 4; Length 601;
Best Local Similarity 99.7%; Pred. No. 2.3e-118;
Matches 380; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGCACTCTGCCAGCCCTCAGAAAGCAATT 460
DB 178 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGCACTCTGCCAGCCCTCAGAAAGCAATT 237
QY 461 TTAGTCTCAAGCAGAGGACAAAGAGGAGATAGTGGCGCACTCCCGTGGCATCACTGCAT 520
DB 238 TTAGTCTCAAGCAGAGGACAAAGAGGAGATAGTGGCGCACTCCCGTGGCATCACTGCAT 297
QY 521 CTTTGAAGACAGACCTTTGTGAAGTCAGAGCTGTCTACATTTGAATCTCAATCGAGCTTC 580
DB 298 CTTTGAAGACAGACCTTTGTGAAGTCAGAGCTGTCTACATTTGAATCTCAATCGAGCTTC 357
QY 581 TGAGATTCGATGATTTCAGGAAGAAAGGATTCAGGTTTGAAGCAAAATCGAGTGAACA 640
DB 358 TGAGATTCGATGATTTCAGGAAGAAAGGATTCAGGTTTGAAGCAAAATCGAGTGAACA 417
QY 641 GCAACCAATCCAATGTTGTAATTCGAAGACTTTGAGTCTCTACCTTACCCGTTCCGTTACCCC 700
DB 418 GCAACCAATCCAATGTTGTAATTCGAAGACTTTGAGTCTCTACCTTACCCGTTCCGTTACCCC 477
QY 701 CACTCTCACAAGCCTCTCTGTAATTTCTGTTTACCCCAAGATATTTACAGGTACATC 760
DB 478 CACTCTCACAAGCCTCTCTGTAATTTCTGTTTACCCCAAGATATTTACAGGTACATC 537
QY 761 TGCAGGAGTCTCTTGGCCAGG 781
DB 538 TGCAGGAGTCTCTTGGCCAGG 558

RESULT 5

US-09-949-016-15957
Sequence 15957, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14

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; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15957
; LENGTH: 35916
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-15957

Query Match
Best Local Similarity 18.1%; Score 379.4; DB 4; Length 35916;
Matches 380; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGGTTGAGCCGTGGATTCTGGGACTCTGGCCAGCCCTCAGAAAGCAATT 460
DB 10781 GTTTAGAACTTGTGGTTGAGCCGTGGATTCTGGGACTCTGGCCAGCCCTCAGAAAGCAATT 10840

QY 461 TTAGTCTAAGCAGACAGACAAGAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCAT 520
DB 10841 TTAGTCTAAGCAGACAGACAAGAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCAT 10900

QY 521 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 580
DB 10901 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 10960

QY 581 TGAGATTTCGATGATTCAGGAAGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACA 640
DB 10961 TGAGATTTCGATGATTCAGGAAGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACA 11020

QY 641 GCAACCAATCCAACTGTGTAATGAAGACTTTGAGTCTCACTTACCCGTTTGGTACCC 700
DB 11021 GCAACCAATCCAACTGTGTAATGAAGACTTTGAGTCTCACTTACCCGTTTGGTACCC 11080

QY 701 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGCAAGATATTTACAGGTACATC 760
DB 11081 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGCAAGATATTTACAGGTACATC 11140

QY 761 TGCAGGAGTCTCTTGGCCAGG 781
DB 11141 TGCAGGAGTCTCTTGGCCAGG 11161

RESULT 6
US-09-949-016-150020
; Sequence 150020, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150020
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150020

Query Match
Best Local Similarity 18.1%; Score 379; DB 4; Length 601;
Matches 379; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGGTTGAGCCGTGGATTCTGGGACTCTGGCCAGCCCTCAGAAAGCAATT 460
DB 10781 GTTTAGAACTTGTGGTTGAGCCGTGGATTCTGGGACTCTGGCCAGCCCTCAGAAAGCAATT 10840

QY 461 TTAGTCTAAGCAGACAGACAAGAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCAT 520
DB 10841 TTAGTCTAAGCAGACAGACAAGAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCAT 10900

QY 521 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 580
DB 10901 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 10960

QY 581 TGAGATTTCGATGATTCAGGAAGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACA 640
DB 10961 TGAGATTTCGATGATTCAGGAAGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACA 11020

QY 641 GCAACCAATCCAACTGTGTAATGAAGACTTTGAGTCTCACTTACCCGTTTGGTACCC 700
DB 11021 GCAACCAATCCAACTGTGTAATGAAGACTTTGAGTCTCACTTACCCGTTTGGTACCC 11080

QY 701 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGCAAGATATTTACAGGTACATC 760
DB 11081 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGCAAGATATTTACAGGTACATC 11140

QY 761 TGCAGGAGTCTCTTGGCCAGG 781
DB 11141 TGCAGGAGTCTCTTGGCCAGG 11161

RESULT 7
US-09-949-016-150037
; Sequence 150037, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150037
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150037

Query Match
Best Local Similarity 9.1%; Score 190.4; DB 4; Length 601;
Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1369 AGCTCAAGTTTATTTTACCCAGGAAAGCTCCATTGTTTCAACATTGTGGAATTTCTG 1428
DB 18 AGCTCAAGTTTATTTTACCCAGGAAAGCTCCATTGTTTCAACATTGTGGAATTTCTG 77

QY 1429 TCTACTGCCCAACAGAGGTTCTCGGAGGAGTATGTACAGGCTGGCTTGTGTTG 1488
DB 78 TCTACTGCCCAACAGAGGTTCTCGGAGGAGTATGTACAGGCTGGCTTGTGTTG 137

QY 1489 GTTCGTTTCAGTTCTTTCAGCCCAACATACATCATCCATCCATGAAGACAGCGGAAAGCCCTG 1548
DB 138 GTTCGTTTCAGTTCTTTCAGCCCAACATACATCATCCATCCATGAAGACAGCGGAAAGCCCTG 197
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Best Local Similarity 99.5%; Pred. No. 8e-118;
Matches 379; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGGTTGAGCCGTGGATTCTGGGACTCTGGCCAGCCCTCAGAAAGCAATT 460
DB 165 GTTTAGAACTTGTGGTTGAGCCGTGGATTCTGGGACTCTGGCCAGCCCTCAGAAAGCAATT 224

QY 461 TTAGTCTAAGCAGACAGACAAGAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCAT 520
DB 225 TTAGTCTAAGCAGACAGACAAGAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCAT 284

QY 521 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 580
DB 285 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 344

QY 581 TGAGATTTCGATGATTCAGGAAGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACA 640
DB 345 TGAGATTTCGATGATTCAGGAAGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACA 404

QY 641 GCAACCAATCCAACTGTGTAATGAAGACTTTGAGTCTCACTTACCCGTTTGGTACCC 700
DB 405 GCAACCAATCCAACTGTGTAATGAAGACTTTGAGTCTCACTTACCCGTTTGGTACCC 464

QY 701 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGCAAGATATTTACAGGTACATC 760
DB 465 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGCAAGATATTTACAGGTACATC 524

QY 761 TGCAGGAGTCTCTTGGCCAGG 781
DB 525 TGCAGGAGTCTCTTGGCCAGG 545

RESULT 7
US-09-949-016-150037
; Sequence 150037, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150037
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150037

Query Match
Best Local Similarity 99.5%; Pred. No. 1.3e-53;
Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1369 AGCTCAAGTTTATTTTACCCAGGAAAGCTCCATTGTTTCAACATTGTGGAATTTCTG 1428
DB 18 AGCTCAAGTTTATTTTACCCAGGAAAGCTCCATTGTTTCAACATTGTGGAATTTCTG 77

QY 1429 TCTACTGCCCAACAGAGGTTCTCGGAGGAGTATGTACAGGCTGGCTTGTGTTG 1488
DB 78 TCTACTGCCCAACAGAGGTTCTCGGAGGAGTATGTACAGGCTGGCTTGTGTTG 137

QY 1489 GTTCGTTTCAGTTCTTTCAGCCCAACATACATCATCCATCCATGAAGACAGCGGAAAGCCCTG 1548
DB 138 GTTCGTTTCAGTTCTTTCAGCCCAACATACATCATCCATCCATGAAGACAGCGGAAAGCCCTG 197
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Qy 1549 GCTCCTAAGATA 1560
Db 198 GCTCCTAAGGTA 209

RESULT 8
US-09-949-016-150047
; Sequence 150047, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150047
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150047

Query Match 9.0%; Score 188.8; DB 4; Length 601;
Best Local Similarity 93.3%; Pred. No. 4.7e-53;
Matches 196; Conservative 1; Mismatches 13; Indels 0; Gaps 0;

Qy 1761 TTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1820
Db 191 TTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 250

Qy 1821 TTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 1880
Db 251 TTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 310

Qy 1881 ATCCAGCTTTCATGCGCAGAGTGGCGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 1940
Db 311 ATCCAGCTTTCATGCGCAGAGTGGCGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 370

Qy 1941 GTGTGTGGAGATGCAAGAATATGCGCCAAG 1970
Db 371 GTGTGTGGAGTCAATATCGTGCCTAAG 400

RESULT 9
US-09-949-016-150048
; Sequence 150048, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150048
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150048

Query Match 8.9%; Score 187.2; DB 4; Length 601;
Best Local Similarity 92.9%; Pred. No. 1.1e-52;
Matches 195; Conservative 1; Mismatches 14; Indels 0; Gaps 0;

Qy 1761 TTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1820
Db 155 TTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 214

Qy 1821 TTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 1880
Db 215 TTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 274

Qy 1881 ATCCAGCTTTCATGCGCAGAGTGGCGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 1940
Db 275 ATCCAGCTTTCATGCGCAGAGTGGCGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 334

Qy 1941 GTGTGTGGAGATGCAAGAATATGCGCCAAG 1970
Db 335 GTGTGTGGAGTCAATATCGTGCCTAAG 364

RESULT 10
US-09-949-016-150046
; Sequence 150046, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150046
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150046

Query Match 8.9%; Score 186.4; DB 4; Length 601;
Best Local Similarity 99.5%; Pred. No. 3.1e-52;
Matches 187; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1761 TTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1820
Db 413 TTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 472

Qy 1821 TTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 1880
Db 473 TTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 532

Qy 1881 ATCCAGCTTTCATGCGCAGAGTGGCGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 1940
Db 533 ATCCAGCTTTCATGCGCAGAGTGGCGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 592

Qy 1941 GTGTGTGG 1948
Db 593 GTGTGTGG 600

RESULT 11
US-09-566-921-88
; Sequence 88, Application US/09566921
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; ORGANISM: Human
US-09-949-016-150048

Query Match 8.9%; Score 187.2; DB 4; Length 601;
Best Local Similarity 92.9%; Pred. No. 1.1e-52;
Matches 195; Conservative 1; Mismatches 14; Indels 0; Gaps 0;

Qy 1761 TTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1820
Db 155 TTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 214

Qy 1821 TTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 1880
Db 215 TTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 274

Qy 1881 ATCCAGCTTTCATGCGCAGAGTGGCGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 1940
Db 275 ATCCAGCTTTCATGCGCAGAGTGGCGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 334

Qy 1941 GTGTGTGGAGATGCAAGAATATGCGCCAAG 1970
Db 335 GTGTGTGGAGTCAATATCGTGCCTAAG 364

RESULT 10
US-09-949-016-150046
; Sequence 150046, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150046
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150046

Query Match 8.9%; Score 186.4; DB 4; Length 601;
Best Local Similarity 99.5%; Pred. No. 3.1e-52;
Matches 187; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1761 TTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1820
Db 413 TTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 472

Qy 1821 TTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 1880
Db 473 TTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 532

Qy 1881 ATCCAGCTTTCATGCGCAGAGTGGCGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 1940
Db 533 ATCCAGCTTTCATGCGCAGAGTGGCGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 592

Qy 1941 GTGTGTGG 1948
Db 593 GTGTGTGG 600

RESULT 11
US-09-566-921-88
; Sequence 88, Application US/09566921
```


Patent No. 682888
; GENERAL INFORMATION:
; APPLICANT: Loring, Jeanne P.
; APPLICANT: Tingley, Debora W.
; APPLICANT: Edwards, Carla M.
; TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE
; FILE REFERENCE: PA-024 US
; CURRENT APPLICATION NUMBER: US/09/566,921
; CURRENT FILING DATE: 2000-05-05
; NUMBER OF SEQ ID NOS: 138
; SOFTWARE: PERL Program
; SEQ ID NO 88
; LENGTH: 2475
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6682888 255828.26
; NAME/KEY: unsure
; LOCATION: 1001, 1011
; OTHER INFORMATION: a, t, c, g, or other
US-09-566-921-88

Query Match 8.3%; Score 174.4; DB 4; Length 2475;
Best Local Similarity 96.7%; Pred. No. 1.1e-47;
Matches 178; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
Qy 510 ATCACTTCATCTTGAGGACAGACCTTGTAAGTCAGAGCTGCTACACATTGAATCTCA 569
Db 1 ATCACTTCATCTTGAGGACAGACCTTGTAAGTCAGAGCTGCTACACATTGAATCTCA 60
Qy 570 AGTCAGGCTCTTGAGATTGATGATTCAGGAGAAAGGATTCTGAGGTTTTGAAGCAAAA 629
Db 61 AGTCAGGCTCTTGAGATTGATGATTCAGGAGAAAGGATTCTGAGGTTTTGAAGCAAAA 120
Qy 630 TGCAGTGAACAGCAACCAATCCATGTTGTAATTCAGCACTTGAATCTTACCTACCG 689
Db 121 TGCAGTGAACAGCAACCAATCCATGTTGTAATTCAGCACTTGAATCTTACCGATCTC 180
Qy 690 TTCCG 693
Db 181 TTCCG 184

RESULT 12
US-09-949-016-150030
; Sequence 150030, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150030
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150030

Query Match 7.4%; Score 155.2; DB 4; Length 601;
Best Local Similarity 98.1%; Pred. No. 1.3e-41;
Matches 157; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 899 TTTCAAATACAGACTTTTCTATCAGCCTCGAGATGCTTCAGCGTGATCTGCCCTAACA 958
Db 315 TCTAGAAATACAGACTTTTCTATCAGCCTCGAGATGCTTCAGCGTGATCTGCCCTAACA 374
Qy 959 GTGATTCTGAGTACAAAGCCTCTCTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 1018
Db 375 GTGATTCTGAGTACAAAGCCTCTCTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 434
Qy 1019 GCGTCCCTTTTGAAATAAAGGCAGACACACAAAGAAAGG 1058
Db 435 GCGTCCCTTTTGAAATAAAGGCAGACACACAAAGAAAGG 474

RESULT 13

US-09-949-016-150031
; Sequence 150031, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150031
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150031

Query Match 7.4%; Score 154.8; DB 4; Length 601;
Best Local Similarity 97.5%; Pred. No. 1.8e-41;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

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Db 151 TCTAGAAATACAGACTTTTCTATCAGCCTCGAGATGCTTCAGCGTGATCTGCCCTAACA 210
Qy 959 GTGATTCTGAGTACAAAGCCTCTCTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 1018
Db 211 GTGATTCTGAGTACAAAGCCTCTCTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 270
Qy 1019 GCGTCCCTTTTGAAATAAAGGCAGACACACAAAGAAAGG 1058
Db 271 GCGTCCCTTTTGAAATAAAGGCAGACACACAAAGAAAGG 310

RESULT 14

US-09-471-276-495
; Sequence 495, Application US/09471276
; Patent No. 6822072
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6822072
; FILE REFERENCE: GENSET.025CP1
; CURRENT APPLICATION NUMBER: US/09/471,276
; CURRENT FILING DATE: 1999-12-21
; EARLIER APPLICATION NUMBER: 09/057,719
; EARLIER FILING DATE: 1998-04-09
; EARLIER APPLICATION NUMBER: 09/069,047
; EARLIER FILING DATE: 1998-04-28
; EARLIER APPLICATION NUMBER: PCT/IB99/00712

; EARLIER FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1622
; SOFTWARE: Patent.pm
; SEQ ID NO 495
; LENGTH: 244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 70..243
; NAME/KEY: sig_peptide
; LOCATION: 70..114
; OTHER INFORMATION: Von Heijne matrix
; OTHER INFORMATION: score 4.40000009536743
; OTHER INFORMATION: seq RFLLYATQQQA/KA
US-09-471-276-495

Query Match 6.2%; Score 130.8; DB 4; Length 244;
Best Local Similarity 88.1%; Pred. No. 1.3e-33;
Matches 141; Conservative 1; Mismatches 18; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 70 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 129
Qy 61 GAATGTGTGAGCAAGCTGTGTCATCGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 130 GAATGTGTGAGCAAGCTGTGTCATCGATTTTCTGCAGATCTTCACTGTATTAGTGAA 189
Qy 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCCTCTTG 160
Db 190 TCCGATAAGGTCCTCGGTGATTCAGATACACCTACTTTTG 229

RESULT 15
US-09-949-016-150007
; Sequence 150007, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150007
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150007

Query Match 6.1%; Score 128.6; DB 4; Length 601;
Best Local Similarity 99.2%; Pred. No. 1.5e-32;
Matches 128; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 236 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 295
Qy 61 GAATGTGTGAGCAAGCTGTGTCATCGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 296 GAATGTGTGAGCAAGCTGTGTCATCGATTTTCTGCAGATCTTCACTGTATTAGTGAA 355
Qy 121 TCCGATAAG 129
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Db 356 TCCGATAAG 364
Search completed: November 8, 2005, 17:00:55
Job time : 237.308 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 16:35:10 ; Search time 1121.01 Seconds
(without alignments)
15440.336 Million cell updates/sec

Title: US-09-371-347A-47
Perfect score: 2093
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Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 9794790 seqs, 4134909567 residues

Total number of hits satisfying chosen parameters: 19589580

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq.*
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24: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
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26: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
27: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
28: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2093	100.0	2093	10	US-09-371-347-47 Sequence 47, Appl
2	2093	100.0	2093	26	US-11-119-096-47 Sequence 47, Appl
3	2079	99.3	2097	10	US-09-371-347-1 Sequence 1, Appl
4	2079	99.3	2097	26	US-11-119-096-1 Sequence 1, Appl
5	2079	99.3	3259	10	US-09-371-347-24 Sequence 24, Appl

RESULT 1

US-09-371-347-47
; Sequence 47, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 47
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-47

ALIGNMENTS

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7	2079	99.3	3259	26	US-11-119-096-24	Sequence 24, Appl
8	2077.4	99.3	2097	10	US-09-371-347-41	Sequence 41, Appl
9	2077.4	99.3	2097	26	US-11-119-096-43	Sequence 43, Appl
10	2077.4	99.3	2097	26	US-11-119-096-41	Sequence 41, Appl
11	2077.4	99.3	2097	26	US-11-119-096-43	Sequence 43, Appl
12	2070.6	98.9	3256	22	US-10-741-600-692	Sequence 692, App
13	2070.6	98.9	3274	22	US-10-741-600-693	Sequence 693, App
14	2063	98.6	2094	10	US-09-371-347-45	Sequence 45, Appl
15	2063	98.6	2094	26	US-11-119-096-45	Sequence 45, Appl
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18	377.8	18.1	591	17	US-10-029-386-1735	Sequence 1735, Ap
19	377.4	18.0	379	17	US-10-029-386-20100	Sequence 20100, A
20	375.8	18.0	379	17	US-10-029-386-15435	Sequence 15435, A
21	286	13.7	583	13	US-09-925-065A-758988	Sequence 758988,
22	284.8	13.6	583	13	US-09-925-065A-827971	Sequence 827971,
23	275.8	13.2	503	24	US-10-450-763-873	Sequence 873, App
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25	200.6	9.6	201	22	US-10-741-600-15584	Sequence 15584, A
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32	200.6	9.6	201	22	US-10-741-600-15600	Sequence 15600, A
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34	200.6	9.6	201	22	US-10-741-600-15609	Sequence 15609, A
35	200.6	9.6	201	22	US-10-741-600-15610	Sequence 15610, A
36	200.6	9.6	201	22	US-10-741-600-15612	Sequence 15612, A
37	200.6	9.6	201	22	US-10-741-600-15613	Sequence 15613, A
38	200.6	9.6	201	22	US-10-741-600-15614	Sequence 15614, A
39	200.6	9.6	201	22	US-10-741-600-15620	Sequence 15620, A
40	200.6	9.6	201	22	US-10-741-600-15621	Sequence 15621, A
41	200.6	9.6	201	22	US-10-741-600-15623	Sequence 15623, A
42	200.6	9.6	201	22	US-10-741-600-15625	Sequence 15625, A
43	200.6	9.6	201	22	US-10-741-600-15629	Sequence 15629, A
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45	200.6	9.6	201	22	US-10-741-600-15631	Sequence 15631, A

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QY	121	TCCGATAAGTATGACCTTAAACCGGAACAGCTCCTCTTGTCTTGTGGTTTCTACCAAG	180
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QY	661	ATTGAAGACTTTGAGTCTCACTTACCCTTACCCGTTACCCGCTCTCAGAGCTCTCTG	720
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QY	661	ATTGAAGACTTTGAGTCTCACTTACCCTTACCCGTTACCCGCTCTCAGAGCTCTCTG	720
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QY	841	GCAGTTCAACTTACTACGAATGATGCAATAAACCACTCTGTGTGTAGAAATTGGACAT	900
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QY	841	GCAGTTCAACTTACTACGAATGATGCAATAAACCACTCTGTGTGTAGAAATTGGACAT	900
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QY	901	TCAAATACAGACTTTTCTATACGCTGGAGATGCTTACGCTGATCTGCCCTTAACAGT	960
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QY	1081	CCTGCGGAGTTCTCTCCAGTTTCACTTTTACCTGGTGTCTTGAATAAATCCGAGCAATTCCT	1140
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QY	1441	ACAGAGTTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGTCTCAGTT	1500
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RESULT 2

US-11-119-096-47
; Sequence 47, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:


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Qy 1921 AGGAGACGGCCATATTTATGTGTGTGGAGTCAAGAGATATGCCCAAGATCTACATG 1980
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Qy 1981 ATGCCCTTGTGCAATTAATAAGCAAGAGGTTGGAGTTGAAAACTAGAACAAATGAAAA 2040
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Qy 2041 CCCTGGCCATTTAAAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCAATA 2093
Db 2041 CCCTGGCCATTTAAAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCAATA 2093

RESULT 3
US-09-371-347-1
; Sequence 1, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-1

Query Match 99.3%; Score 2079; DB 10; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;

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RESULT 5
US-09-371-347-24
; Sequence 24, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371.347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-24
Query Match 99.3%; Score 2079; DB 10; Length 3259;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;
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RESULT 6

US-10-450-763-874
; Sequence 874, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 874
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIMILAR
; LOCATION: (80)..(2173)
; OTHER INFORMATION: 100% homologous to Homo sapiens methionine synthase
; OTHER INFORMATION: reductase, accession number AF025794, Smith-Waterman Score=3624.
US-10-450-763-874

Query Match 99.3%; Score 2079; DB 24; Length 3259;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;
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Qy 1977 CATGATGCCCTTGTGCAAAATAAAGCAAGAGTTGGAGTTGAAAAAACTAGAGCAATG 2036
Db 2060 CATGATGCCCTTGTGCAAAATAAAGCAAGAGTTGGAGTTGAAAAAACTAGAGCAATG 2119
Qy 2037 AAAACCCCTGGCCACTTTAAAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATA 2093
Db 2120 AAAACCCCTGGCCACTTTAAAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATA 2176

RESULT 7

US-11-119-096-24
; Sequence 24, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leciere, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE.
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096

; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PaetSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-24

Query Match 99.3%; Score 2079; DB 26; Length 3259;

Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;

Qy	1	ATGAGGAGTTCTCTACTATATGCTACACAGCAGGACAGGCAAGGCCATGCGAGAA	60
Db	80	ATGAGAGGTTCTGTACTATATGCTACAGCAGGACAGGCAAGGCCATGCGAGAA	139
Qy	61	GAAATGTGTGAGCAAGCTGTGTACATGGAATTTCTGAGATCTTCACTGTATTAGTGA	120
Db	140	GAAATGTGTGAGCAAGCTGTGTACATGGAATTTCTGAGATCTTCACTGTATTAGTGA	199
Qy	121	TCCGATAGTATGACTTAAACCGAAGACAGCTCTCTGTTGTTGTTGTTGTTGTTGTTG	180
Db	200	TCCGATAGTATGACTTAAACCGAAGACAGCTCTCTGTTGTTGTTGTTGTTGTTGTTG	259
Qy	181	GSCACGAGACCCACCGGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240
Db	260	GSCACGAGACCCACCGGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA	319
Qy	241	CTGCCGTTGATTTCTTTGCTCACCTCGGTTATGGGTTACTGGGTTCTGGGTATTCAGAA	300
Db	320	CTGCCGTTGATTTCTTTGCTCACCTCGGTTATGGGTTACTGGGTTCTGGGTATTCAGAA	379
Qy	301	TACACCTACTTTTGAATGGGGGAGATATATGATAAAGCACTTCAAGAGCTTGGAGCC	360
Db	380	TACACCTACTTTTGAATGGGGGAGATATATGATAAAGCACTTCAAGAGCTTGGAGCC	439
Qy	361	CGGCATTTCTATGACACTGACATGCAATGATGATGATGATGATGATGATGATGATGATG	420
Db	440	CGGCATTTCTATGACACTGACATGCAATGATGATGATGATGATGATGATGATGATGATG	499
Qy	421	CGGTGATTTGCTGGAATCTGGGACGCTTCAAGAAAGCAATTTAGGTCAAGCAGAGCAAA	480
Db	500	CGGTGATTTGCTGGAATCTGGGACGCTTCAAGAAAGCAATTTAGGTCAAGCAGAGCAAA	559
Qy	481	GAGGAGATAAGTGGGCACTCCGGTGGCATCACCTGCATCTTGGAGCAGACCTTGTG	540
Db	560	GAGGAGATAAGTGGGCACTCCGGTGGCATCACCTGCATCTTGGAGCAGACCTTGTG	619
Qy	541	AGTCAGAGCTGCTACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Db	620	AGTCAGAGCTGCTACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	679
Qy	601	AGAAAGGATTTCTGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATCCAATGTTGTA	660
Db	680	AGAAAGGATTTCTGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATCCAATGTTGTA	739
Qy	661	ATTGAAGATTTGAGTCTCTACTTACCCTGGTACCCCACTCTCAAGCCCTCTCTG	720
Db	740	ATTGAAGATTTGAGTCTCTACTTACCCTGGTACCCCACTCTCAAGCCCTCTCTG	799
Qy	721	AATATTCCTGGTTTACCCCAAGATATTTAGAGTACATCTGACAGAGTCTCTTGGCCAG	780
Db	800	AATATTCCTGGTTTACCCCAAGATATTTAGAGTACATCTGACAGAGTCTCTTGGCCAG	859

Qy	781	GAGGAAAGCCCAAGATATCTGTGATCTTACAGCAGATCCAGTCTTTTCAAGTCCCAATTTCAAAG	840
Db	860	GAGGAAAGCCCAAGATATCTGTGATCTTACAGCAGATCCAGTCTTTTCAAGTCCCAATTTCAAAG	919
Qy	841	GCAGTTCAACTTACTACGAATGATGCCATAAAACCACCTCTGCTGGTGAATTTGACATTT	900
Db	920	GCAGTTCAACTTACTACGAATGATGCCATAAAACCACCTCTGCTGGTGAATTTGACATTT	979
Qy	901	TCAAATACAGACTTTTCTATCAGCTTGGAGATGCTTTCAGCTGATCTGCTTAAACAGT	960
Db	980	TCAAATACAGACTTTTCTATCAGCTTGGAGATGCTTTCAGCTGATCTGCTTAAACAGT	1039
Qy	961	GATTCGAGGTACAAAGCTTACTCAAGACTGAGCTTGAAGATAAAAGAGAGCACTGC	1020
Db	1040	GATTCGAGGTACAAAGCTTACTCAAGACTGAGCTTGAAGATAAAAGAGAGCACTGC	1099
Qy	1021	GTCTCTTTTGAATAAAGGACAGACAAAGAGAGAGGAGCTTACCTTACCCAGCATATA	1080
Db	1100	GTCTCTTTTGAATAAAGGACAGACAAAGAGAGAGGAGCTTACCTTACCCAGCATATA	1159
Qy	1081	CCTCGGAGTCTTCTCTCAGTTTCACTTGTGCTTGTGAATCCGAGCAATTTCT	1140
Db	1160	CCTCGGAGTCTTCTCTCAGTTTCACTTGTGCTTGTGAATCCGAGCAATTTCT	1219
Qy	1141	AAAAAGGCAATTTTGGAGCCCTTGTGCACTATACAGTGAAGTGTGAAAAGCGCAGG	1200
Db	1220	AAAAAGGCAATTTTGGAGCCCTTGTGCACTATACAGTGAAGTGTGAAAAGCGCAGG	1279
Qy	1201	CTACAGGAGCTGTGCAAGTAAACAGGAGCAGCCGATATATAGCCGTTTGTACGAGATGCC	1260
Db	1280	CTACAGGAGCTGTGCAAGTAAACAGGAGCAGCCGATATATAGCCGTTTGTACGAGATGCC	1339
Qy	1261	TGTGCTCTTGTGGAATCT	1320
Db	1340	TGTGCTCTTGTGGAATCT	1399
Qy	1321	CTGTCTGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGAAGCTCAAGTTTA	1380
Db	1400	CTGTCTGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGAAGCTCAAGTTTA	1459
Qy	1381	TTTCAACCCAGACCATATTCGTGTGAAGCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT	1440
Db	1460	TTTCAACCCAGACCATATTCGTGTGAAGCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT	1519
Qy	1441	ACAGAGTTCTGCGAAGGAGTATGACAGCTTGGCTGGCTTGTGTTGTTGTTGTTGTTGTTG	1500
Db	1520	ACAGAGTTCTGCGAAGGAGTATGACAGCTTGGCTGGCTTGTGTTGTTGTTGTTGTTGTTG	1579
Qy	1501	CTTCAGCCAAACATACATGATCCCATGAAGCAGCGGGAAGCCCTGGCTCTTAAGATA	1560
Db	1580	CTTCAGCCAAACATACATGATCCCATGAAGCAGCGGGAAGCCCTGGCTCTTAAGATA	1639
Qy	1561	TCCATCTCTCTGAAACAAATTTCTTCACTTACAGATGAGCCCTCAATCCCAATC	1620
Db	1640	TCCATCTCTCTGAAACAAATTTCTTCACTTACAGATGAGCCCTCAATCCCAATC	1699
Qy	1621	ATAATGTTGGTTCAGGAAACCGGATAGCCCGCTTTATTGGGTTCTTACCAAT---	1676
Db	1700	ATAATGTTGGTTCAGGAAACCGGATAGCCCGCTTTATTGGGTTCTTACCAATAGAG	1759
Qy	1677	AAACTCCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGGTCTTAAAGATGGG	1736
Db	1760	AAACTCCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGGTCTTAAAGATGGG	1819
Qy	1737	AGGCATTAAGGATAGGATTTCTATTGAGAAAGAGCTCAGACATTTCTTAAAGATGGG	1796
Db	1820	AGGCATTAAGGATAGGATTTCTATTGAGAAAGAGCTCAGACATTTCTTAAAGATGGG	1879
Qy	1797	ATCTTAACTCATCTAAAGGTTTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGAAGCC	1856
Db	1880	ATCTTAACTCATCTAAAGGTTTCTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGAAGCC	1939
Qy	1857	CCAGCAAGTATGTACAGACAAACATCCAGCTTTCATGGCCAGAGGTTGGCGAGATCTCTC	1916

Wed Nov 9 14:54:10 2005

1501	Db	CTTCAGGCCAAACATACATGTCATCCCATGGAAGACAGCGGGGAAAGCCCTGGCTCTCTAAGATA	1560
1561	Qy	TCCATCTCTCCTCGAACAACAAATTCCTTTCCACTTACAGATGACCCCTCAATCCGCATC	1620
1561	Db		1620
1561	Db	TCCATCTCTCCTCGAAACAAATAATTCCTTTCCACTTACAGATGACCCCTCAATCCGCATC	1620
1621	Qy	ATAATGTGGGTCCAGGAAACGGGCATAGCCCCGTTTATTGGGTTCCTACAAAT----	1676
1621	Db		1676
1621	Db	ATAATGTGGGTCCAGGAAACGGGCATAGCCCCGTTTATTGGGTTCCTACAAATAGAGAG	1680
1677	Qy	AAACTCCAGAAACAAACCCAGATGGAAATTTTGGAGCAATGTGTGTTTTTGGTCTC	1736
1681	Db	AAACTCCAGAAACAAACCCAGATGGAAATTTTGGAGCAATGTGTGTTTTTGGTCTC	1740
1737	Qy	AGGCATAAGGATAGGGATTATCTATTACAGAAAAGAGCTCAGACATTTCTTTAAGCATGGG	1796
1741	Db	AGGCATAAGGATAGGGATTATCTATTACAGAAAAGAGCTCAGACATTTCTTTAAGCATGGG	1800
1797	Qy	ATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCTGTGGGAGGAGGAAGCC	1856
1801	Db	ATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCTGTGGGAGGAGGAAGCC	1860
1857	Qy	CCAGCAAGTATGTACAAAGCAACATCCAGCTTCATGGCCAGCAGGTGGCGCAATCTCT	1916
1861	Db	CCAGCAAGTATGTACAAAGCAACATCCAGCTTCATGGCCAGCAGGTGGCGCAATCTCT	1920
1917	Qy	CTCCAGGAGAAACGGCCATATTATGTGTGTGGAGATGCAAGAATAATGGGCCAAGGATGTA	1976
1921	Db	CTCCAGGAGAAACGGCCATATTATGTGTGTGGAGATGCAAGAATAATGGGCCAAGGATGTA	1980
1977	Qy	CATGATGCCCTTGTGCCAATAATAAGCAAAAGAGGTTGGAGCTTGAAAACTAGAAAGCAATG	2036
1981	Db	CATGATGCCCTTGTGCCAATAATAAGCAAAAGAGGTTGGAGCTTGAAAACTAGAAAGCAATG	2040
2037	Qy	AAAAACCTGGCCACTTTTAAAGAAAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA	2093
2041	Db	AAAAACCTGGCCACTTTTAAAGAAAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA	2097

```

RESULT 9
US-09-371-347-43
; Sequence 43, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371.347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-43

Query Match          99.3%; Score 2077.4; DB 10; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;

Qy      | 1  ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGACAGGCAAAAGGCATCGCAGAA 60
Db      | 1  ATGAGGAGGTTTCTGTTACTATATGCTACACAGGACAGGCAAAAGGCATCGCAGAA 60
Qy      | 61  GAAATGTGTCAGCAAGCTGTGGTACATGGATTTCCTGCAGATCTTCACTGTATTAGTGA 120

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61	DB	GA	AATGTGTGAGCAAGCTGTGGTACATGGATTCTTCGAGATCTTCACATATATTAGTGA	120
121	QY	TC	CGATAAGTATGACCTAAAAACCGAAACAGCTCCTCTGTGTGTCTGTGGTTTCTACCAACG	180
121	DB	TC	CGATAAGTATGACCTAAAAACCGAAACAGCTCCTCTGTGTGTGTCTGTGGTTTCTACCAACG	180
181	QY	GG	CACCGGAGACCCACCGACACAGCCCGCAAGTTGTTAAGGAAATACAGAAACCAACA	240
181	DB	GG	CACCGGAGACCCACCGACACAGCCCGCAAGTTGTTAAGGAAATACAGAAACCAACA	240
241	QY	CT	CGCGGTTGATTCTTTCTCCTCACCCTGCGGTATGGGTACTCGGTCTCCGTGATTTCAGAA	300
241	DB	CT	CGCGGTTGATTCTTTCTCCTCACCCTGCGGTATGGGTACTCGGTCTCCGTGATTTCAGAA	300
301	QY	TA	CACCTACTTTTGCATGGGGGGAAGATAAATTGATAAAACGACTTCAAGAGCTTGGAGCC	360
301	DB	TA	CACCTACTTTTGCATGGGGGGAAGATAAATTGATAAAACGACTTCAAGAGCTTGGAGCC	360
361	QY	CG	GCATTTCTATGACACTGGACATGACAGATGACTGTGAGTTTAGAACTTGTGGTTGAG	420
361	DB	CG	GCATTTCTATGACACTGGACATGACAGATGACTGTGAGTTTAGAACTTGTGGTTGAG	420
421	QY	CG	TGCATTTCTGGACTCTCGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA	480
421	DB	CG	TGCATTTCTGGACTCTCGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA	480
481	QY	GAG	GAGATAAGTGGCGCACTCCGGTGGCATCACCTGCGATCCTTGAGGACAGACCTTGTG	540
481	DB	GAG	GAGATAAGTGGCGCACTCCGGTGGCATCACCTGCGATCCTTGAGGACAGACCTTGTG	540
541	QY	AA	GTGAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
541	DB	AA	GTGAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
601	QY	AG	AAAGGATCTGAGGTTTGAAGCAAAATGCAGTGAAAGCAACCAATCCAAATGTTGA	660
601	DB	AG	AAAGGATCTGAGGTTTGAAGCAAAATGCAGTGAAAGCAACCAATCCAAATGTTGA	660
661	QY	AT	TGAAGACTTTGAGTGCTCACTTACCCTTCGGTACCCCACTCTCAAGGCTCTCTG	720
661	DB	AT	TGAAGACTTTGAGTGCTCACTTACCCTTCGGTACCCCACTCTCAAGGCTCTCTG	720
721	QY	AA	TATTTCTGGTTTACCCCAAGAAATATTTACAGGTAATCTGCGAGAGTCTCTTGGCCAG	780
721	DB	AA	TATTTCTGGTTTACCCCAAGAAATATTTACAGGTAATCTGCGAGAGTCTCTTGGCCAG	780
781	QY	GAG	GAAGCCAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGTGCCTTCAAG	840
781	DB	GAG	GAAGCCAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGTGCCTTCAAG	840
841	QY	GC	AGTTTCAACTTACTACGAATGATGCATAAAACCACTCTGCTGTAGAAATTTGGACATT	900
841	DB	GC	AGTTTCAACTTACTACGAATGATGCATAAAACCACTCTGCTGTAGAAATTTGGACATT	900
901	QY	TC	AAATACAGACTTTTCTATCAGCCTGGAGATGCCTTCAGCGTGATCTGCCCTAACAGT	960
901	DB	TC	AAATACAGACTTTTCTATCAGCCTGGAGATGCCTTCAGCGTGATCTGCCCTAACAGT	960
961	QY	GA	TTCTGAGGTACAAAGCCCTACTCCAAGACTGCAGTTTGAAGATAAAAGAGAGCACTGC	1020
961	DB	GA	TTCTGAGGTACAAAGCCCTACTCCAAGACTGCAGTTTGAAGATAAAAGAGAGCACTGC	1020
1021	QY	GT	CTTTTGCATAAAGCAGACACAAAGAAAGGAGCTACCTTTACCCAGCATATA	1080
1021	DB	GT	CTTTTGCATAAAGCAGACACAAAGAAAGGAGCTACCTTTACCCAGCATATA	1080
1081	QY	CT	CGCGGATGTTCTCTCCAGTTCATTTTTACCTGGTGTCTTGAATTCGGCAATTCCT	1140
1081	DB	CT	CGCGGATGTTCTCTCCAGTTCATTTTTACCTGGTGTCTTGAATTCGGCAATTCCT	1140
1141	QY	AA	AAAGGCAATTTTGGAGCCCTTGTGGACTATACAGTGCAGTGCTGAAAAGCCAGG	1200
1141	DB	AA	AAAGGCAATTTTGGAGCCCTTGTGGACTATACAGTGCAGTGCTGAAAAGCCAGG	1200

Qy 721 AATATTCCTGTTTACCCCGAGATATTTTACAGGTACATCTGCGAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCGAGATATTTTACAGGTACATCTGCGAGGAGTCTCTTGGCCAG 780
Qy 781 GAGAAAGCCAAAGTATCTGCTACCTTCAGCAGATCCAGTTTTTCAAGTGCCTCAATTTCAAAG 840
Db 781 GAGAAAGCCAAAGTATCTGCTACCTTCAGCAGATCCAGTTTTTCAAGTGCCTCAATTTCAAAG 840
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGCAATTT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGCAATTT 900
Qy 901 TCAATACAGACTTTTCTCTACGCTGGAGATGCTTTCAGCGTATCTGCGCTTAAAGT 960
Db 901 TCAATACAGACTTTTCTCTACGCTGGAGATGCTTTCAGCGTATCTGCGCTTAAAGT 960
Qy 961 GATTCGAGGTACAAAGCCTACTCTCAAGACTGTCAGCTTTGAAGATAAAAGAGACACTGC 1020
Db 961 GATTCGAGGTACAAAGCCTACTCTCAAGACTGTCAGCTTTGAAGATAAAAGAGACACTGC 1020
Qy 1021 GTCTTTTGAATAAAGGCGAGACACAAAGAAAGAGAGCTACTCTTACCCCGACATATA 1080
Db 1021 GTCTTTTGAATAAAGGCGAGACACAAAGAAAGAGAGCTACTCTTACCCCGACATATA 1080
Qy 1081 CCTGGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1081 CCTGGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACATATACAGTACAGTGTGAAAGCGCAGG 1200
Db 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACATATACAGTACAGTGTGAAAGCGCAGG 1200
Qy 1201 CTACAGGAGCTGTGCAGTAAACAAGGGGCGACCCGATTTATAGCCCTTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGCAGTAAACAAGGGGCGACCCGATTTATAGCCCTTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTGTTGGATCTCTCTGCTTTCCTTTCCTTTCCTTTCCTTTCCTTTCCTTTCCT 1320
Db 1261 TGTGCTGCTGTTGGATCTCTCTGCTTTCCTTTCCTTTCCTTTCCTTTCCTTTCCTTTCCT 1320
Qy 1321 CTGCTCGAATCTTCTTCAATCTTCAACCATTTGTGGAATTTCTGTTACTGTCACCA 1380
Db 1321 CTGCTCGAATCTTCTTCAATCTTCAACCATTTGTGGAATTTCTGTTACTGTCACCA 1380
Qy 1381 TTTTCAACCGAAGAGCTCCATTTTGTCTTCAACCATTTGTGGAATTTCTGTTACTGTCACCA 1440
Db 1381 TTTTCAACCGAAGAGCTCCATTTTGTCTTCAACCATTTGTGGAATTTCTGTTACTGTCACCA 1440
Qy 1441 ACAGAGTTCTGCGAAGGGAGTATGTACAGGCTGGCTTGGCTTGGTTGGTTGCTTCAGTT 1500
Db 1441 ACAGAGTTCTGCGAAGGGAGTATGTACAGGCTGGCTTGGCTTGGTTGGTTGCTTCAGTT 1500
Qy 1501 CTTTCAGCAACATACATGATCCCATGACAGAGCGGGAAGCCCTGCTCTTAAAGATA 1560
Db 1501 CTTTCAGCAACATACATGATCCCATGACAGAGCGGGAAGCCCTGCTCTTAAAGATA 1560
Qy 1561 TCCATCTCTCTCGAACAACAATTTCTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAACAATTTCTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
Qy 1621 ATATGTGGGTTCAGGAACCGGCAATAGCCCGTTTATTTGGTTTCTTACCAAT ---AG 1676
Db 1621 ATATGTGGGTTCAGGAACCGGCAATAGCCCGTTTATTTGGTTTCTTACCAAT ---AG 1676
Qy 1677 AAATCCAGAAACACACAGATGGAATTTTGGAGCAATGTTGTTTGGTCTGC 1736
Db 1677 AAATCCAGAAACACACAGATGGAATTTTGGAGCAATGTTGTTTGGTCTGC 1736
Qy 1737 AGGCATAGGATAGGATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGTGGG 1796
Db 1737 AGGCATAGGATAGGATTTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGTGGG 1796
Qy 1797 ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTCTCTGTTGGGAGGAGGAGCC 1856

Db 1801 ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTCTCTTGGGAGGAGGAGCC 1860
Qy 1857 CCAGCAAGTATGTACAAAGCAACATCCAGCTTCATGCGCAGCAGGTGGCGAGATCTTC 1916
Db 1861 CCAGCAAGTATGTACAAAGCAACATCCAGCTTCATGCGCAGCAGGTGGCGAGATCTTC 1920
Qy 1917 CTCAGGAGAACCGCCATATTTATGTGTGGAGATGCAAGAAATATATGCGCAAGATGTA 1976
Db 1921 CTCAGGAGAACCGCCATATTTATGTGTGGAGATGCAAGAAATATATGCGCAAGATGTA 1980
Qy 1977 CATGATCCCTTGTGCAAAATAAAGCAAGAGTTGGAGTTGAAAACTAAGAGCAATG 2036
Db 1981 CATGATCCCTTGTGCAAAATAAAGCAAGAGTTGGAGTTGAAAACTAAGAGCAATG 2040
Qy 2037 AAAACCCCTGCGCACTTTTAAAGAAAGAAACGCTTACCTTCAGGATATTTGGTCATAA 2093
Db 2041 AAAACCCCTGCGCACTTTTAAAGAAAGAAACGCTTACCTTCAGGATATTTGGTCATAA 2097

RESULT 11

US-11-119-096-43
; Sequence 43, Application US/111119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Rozen, Roy A,
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rothenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; FILE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-43

Query Match 99.3%; Score 2077.4; DB 26; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;
Qy 1 ATGAGGAGGTTTCTGTACTATATGTACAGCAGGAGCAGGCAAGGCGCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTACTATATGTACAGCAGGAGCAGGCAAGGCGCATCGCAGAA 60
Qy 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGAGATTTTCTGAGATTTTCTATTTAGTGA 120
Db 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGAGATTTTCTGAGATTTTCTATTTAGTGA 120
Qy 121 TCCGATAAGTATGACCTTAAACCGAAACAGCTTCTTGTGTTGTTGTTTCTACACG 180
Db 121 TCCGATAAGTATGACCTTAAACCGAAACAGCTTCTTGTGTTGTTGTTTCTACACG 180
Qy 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Qy 241 CTGCCGGTTGATTTCTTTTGTCTCACCTGCGGTATGGGTTACTGGGTCTCGGTGATTCAGAA 300

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Db 241 |||||CTCGCGGTGATTTCTTCTGCTCACCTGGGTATGGGTATCTGGTCTCGGTATCAGAA 300
Qy 301 |||||TACACCTACTTTTGCATATGGGGGAGAGATTAATGATAAAGCACTTCAAGAGCTTGGAGCC 360
Db 301 |||||TACACCTACTTTTGCATATGGGGGAGAGATTAATGATAAAGCACTTCAAGAGCTTGGAGCC 360
Qy 361 |||||CGGCATTTCTATGACACTGACATGACAGATGACTGTGTAGGTTTGTAGAACCTTGTGTTGAG 420
Db 361 |||||CGGCATTTCTATGACACTGACATGACAGATGACTGTGTAGGTTTGTAGAACCTTGTGTTGAG 420
Qy 421 |||||CCGTGGATTCCTGGACTCTCGCCAGCCCTCAGAAAGCAATTTAGGTCAAGCAGAGACAA 480
Db 421 |||||CCGTGGATTCCTGGACTCTCGCCAGCCCTCAGAAAGCAATTTAGGTCAAGCAGAGACAA 480
Qy 481 |||||GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTCGATCCTTTGAGGACAGACCTTTGTG 540
Db 481 |||||GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTCGATCCTTTGAGGACAGACCTTTGTG 540
Qy 541 |||||AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 600
Db 541 |||||AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 600
Qy 601 |||||AGAAAGGATTCAGAGCTTTTCAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
Db 601 |||||AGAAAGGATTCAGAGCTTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
Qy 661 |||||ATTGAAGACTTTGAGTCTCTCACTTACCCCGTGGTACCCCGACTCTCACAAGCCTCTCTG 720
Db 661 |||||ATTGAAGACTTTGAGTCTCTCACTTACCCCGTGGTACCCCGACTCTCACAAGCCTCTCTG 720
Qy 721 |||||AATATTCCTGGTTTACCCCGAGATATTTACAGTACATCTGCAAGGAGTCTTTGGCCAG 780
Db 721 |||||AATATTCCTGGTTTACCCCGAGATATTTACAGTACATCTGCAAGGAGTCTTTGGCCAG 780
Qy 781 |||||GAGGAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTCAGTGGCCAAATTTCAAAG 840
Db 781 |||||GAGGAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTCAGTGGCCAAATTTCAAAG 840
Qy 841 |||||GCAGTTCAACTTACTACGAATGATGATGATGATGATGATGATGATGATGATGATGATGATG 900
Db 841 |||||GCAGTTCAACTTACTACGAATGATGATGATGATGATGATGATGATGATGATGATGATG 900
Qy 901 |||||TCAAAATACAGCTTTTCTTATCAGCTTGGAGATGCTTTCAGCGTATCTGCTTAAACAGT 960
Db 901 |||||TCAAAATACAGCTTTTCTTATCAGCTTGGAGATGCTTTCAGCGTATCTGCTTAAACAGT 960
Qy 961 |||||GATTTCTGAGGTACAAAGCCTACTCCAAGACTGAGCTTGAAGATAAAGAGACACTGC 1020
Db 961 |||||GATTTCTGAGGTACAAAGCCTACTCCAAGACTGAGCTTGAAGATAAAGAGACACTGC 1020
Qy 1021 |||||GTCTTTTGAATAAAGGAGACACAAAGAGAGAGCTACTTACCCCGACATATA 1080
Db 1021 |||||GTCTTTTGAATAAAGGAGACACAAAGAGAGAGCTACTTACCCCGACATATA 1080
Qy 1081 |||||CCTGCGGATGTTCTCTCCAGTTCATTTTACCTGCTGCTTGAATCCGAGCAATTCCT 1140
Db 1081 |||||CCTGCGGATGTTCTCTCCAGTTCATTTTACCTGCTGCTTGAATCCGAGCAATTCCT 1140
Qy 1141 |||||AAAAAGGCATTTTTCGAGCCCTTGTGAGCTATACCAAGTACAGTGTCTGAAAGCGCAGG 1200
Db 1141 |||||AAAAAGGCATTTTTCGAGCCCTTGTGAGCTATACCAAGTACAGTGTCTGAAAGCGCAGG 1200
Qy 1201 |||||CTACAGAGCTGTGCAGTAAACAAAGGCGAGCCGATTTATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 |||||CTACAGAGCTGTGCAGTAAACAAAGGCGAGCCGATTTATAGCCGCTTTGTACGAGATGCC 1260
Qy 1261 |||||TGTGCTGCTGTGTTGGATCTCTCTGCTTCTCTGCTTCTGCGCAGCCACCACTCAGTCTC 1320
Db 1261 |||||TGTGCTGCTGTGTTGGATCTCTCTGCTTCTCTGCTTCTGCGCAGCCACCACTCAGTCTC 1320
Qy 1321 |||||CTGCTCGAAACATCTTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
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Db 1321 |||||CTGCTCGAAACATCTTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Qy 1381 |||||TTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGTCTACTGCCACA 1440
Db 1381 |||||TTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGTCTACTGCCACA 1440
Qy 1441 |||||ACAGAGGTTCTGCGGAAGGAGTATGTCAGGGCTGGCTGGCTTTGTTGGTTGCTTCAGTT 1500
Db 1441 |||||ACAGAGGTTCTGCGGAAGGAGTATGTCAGGGCTGGCTGGCTTTGTTGGTTGCTTCAGTT 1500
Qy 1501 |||||CTTCAGCAAAACATACATGATCCCATGAAGACAGCGGGAAAGCCCTGGCTCTCTAAGATA 1560
Db 1501 |||||CTTCAGCAAAACATACATGATCCCATGAAGACAGCGGGAAAGCCCTGGCTCTCTAAGATA 1560
Qy 1561 |||||TCCATCTCTCTCGAACACAAATTTTCCATCTTACAGATGACCCCTCAATCCCATC 1620
Db 1561 |||||TCCATCTCTCTCGAACACAAATTTTCCATCTTACAGATGACCCCTCAATCCCATC 1620
Qy 1621 |||||ATAATGTTGGTCCAGGAACCGCATAGCCCGTTTATTTGGTTCTTCAACAT ---AG 1676
Db 1621 |||||ATAATGTTGGTCCAGGAACCGCATAGCCCGTTTATTTGGTTCTTCAACATAGAG 1680
Qy 1677 |||||AAACTCCAGAAACAAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1736
Db 1681 |||||AAACTCCAGAAACAAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
Qy 1737 |||||AGCATTAAGATAGGATTTATCTTATCAGAAAGAGCTCAGACATTTCTTAAGCATGGG 1796
Db 1741 |||||AGCATTAAGATAGGATTTATCTTATCAGAAAGAGCTCAGACATTTCTTAAGCATGGG 1800
Qy 1797 |||||ATCTTAATCTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTCTGTTGGGAGGAGGAAGCC 1856
Db 1801 |||||ATCTTAATCTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTCTGTTGGGAGGAGGAAGCC 1860
Qy 1857 |||||CCAGCAAAAGTATGTACAAACAACATCCAGCTTCATGCGCAGCAGGTGGCGAGATCCTC 1916
Db 1861 |||||CCAGCAAAAGTATGTACAAACAACATCCAGCTTCATGCGCAGCAGGTGGCGAGATCCTC 1920
Qy 1917 |||||CTCCAGGAGAACGGCCATATTTATGTTGTGGAGATGCAAGATATATGCGCAAGGATGTA 1976
Db 1921 |||||CTCCAGGAGAACGGCCATATTTATGTTGTGGAGATGCAAGATATATGCGCAAGGATGTA 1980
Qy 1977 |||||CATGATCCCTTGTGCAATAATAAGCAAAAGAGTTTGGAGTTGAAAACTAGAGCAATG 2036
Db 1981 |||||CATGATCCCTTGTGCAATAATAAGCAAAAGAGTTTGGAGTTGAAAACTAGAGCAATG 2040
Qy 2037 |||||AAAACTGCGCCACTTTTAAAGAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA 2093
Db 2041 |||||AAAACTGCGCCACTTTTAAAGAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA 2097
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RESULT 12

US-10-741-600-692

; Sequence 692, Application US/10741600

; Publication No. US20050026169A1

; GENERAL INFORMATION:

; APPLICANT: CARGILL, Michele et al.

; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

; FILE REFERENCE: CL001499

; CURRENT APPLICATION NUMBER: US/10/741,600

; NUMBER OF SEQ ID NOS: 73997

; SOFTWARE: FASTSEQ for Windows Version 4.0

; SEQ ID NO 692

; LENGTH: 3256

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-741-600-692

Query Match

Best Local Similarity 98.9%; Score 2070.6; DB 22; Length 3256;

Matches 2072; Conservative 21; Mismatches 0; Indels 4; Gaps 1;

Qy	1	ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGGA	60
Db	94	ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGGA	153
Qy	61	GAATATGTGTGAGCAAGCTGTGGTACATCGATTTTCTGCAGATCTTCACTGTATTAGTGAA	120
Db	154	GAATATGTGTGAGCAAGCTGTGGTACATCGATTTTCTGCAGATCTTCACTGTATTAGTGAA	213
Qy	121	TCCGATTAAGTATGACCTTAATAAACCGAAACAGCTCCTCTTGTGTGTGTGTCTTACACG	180
Db	214	TCCGATTAAGTATGACCTTAATAAACCGAAACAGCTCCTCTTGTGTGTGTGTCTTACACG	273
Qy	181	GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTTAAGGAAATACAGAAACAAACA	240
Db	274	GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTTAAGGAAATACAGAAACAAACA	333
Qy	241	CTGCCGGTGTGATTTCTTTGTCTCACTCGCGGTATGGTTACITGGGTCTCGGTGATTTCAGAA	300
Db	334	CTGCCGGTGTGATTTCTTTGTCTCACTCGCGGTATGGTTACITGGGTCTTGGTATTCAGAA	393
Qy	301	TACACTACTTTTGCATATGGGGGAAGATAATTGATAAACGATTCACAGAGCTTTGGAGCC	360
Db	394	TACACTACTTTTGCATATGGGGGAAGATAATTGATAAACGATTCACAGAGCTTTGGAGCC	453
Qy	361	CGGCATTTCTATGACACTGGACATGCAGATGACITGTGTAGGTTTATAGAACTTGTGGTTGAG	420
Db	454	CGGCATTTCTATGACACTGGACATGCAGATGACITGTGTAGGTTTATAGAACTTGTGGTTGAG	513
Qy	421	CCGTGGATTTGTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGTTCAAAGCAGAGCAAA	480
Db	514	CCGTGGATTTGTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGTTCAAAGCAGAGCAAA	573
Qy	481	GAGAGATTAAGTGGCGCATCCCCGGTGGCATCACTGGATCCTTTGAGGACAGACCTTGTG	540
Db	574	GAGAGATTAAGTGGCGCATCCCCGGTGGCATCACTGGATCCTTTGAGGACAGACCTTGTG	633
Qy	541	AAATCAGAGCTGTACACATTTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGGA	600
Db	634	AAATCAGAGCTGTACACATTTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGGA	693
Qy	601	AGAAAGGATTCAGAGGTTTTGAAGCAAAATGCAGTGAAACGAAACCAATCCAAATGTTGTA	660
Db	694	AGAAAGGATTCAGAGGTTTTGAAGCAAAATGCAGTGAAACGAAACCAATCCAAATGTTGTA	753
Qy	661	ATTGAAGACTTTGAGTCTCTACTTTACCCGTTCCGTTACCCCACTCTCAAGGCTCTCTG	720
Db	754	ATTGAAGACTTTGAGTCTCTACTTTACCCGTTCCGTTACCCCACTCTCAAGGCTCTCTG	813
Qy	721	AATATTCTGGTTTACCCCGAGATATTTACAGGTATCATCTGCAGGAGTCTCTTGGCCAG	780
Db	814	AATATTCTGGTTTACCCCGAGATATTTACAGGTATCATCTGCAGGAGTCTCTTGGCCAG	873
Qy	781	GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG	840
Db	874	GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG	933
Qy	841	GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGGACATT	900
Db	934	GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGGACATT	993
Qy	901	TCAATACAGACTTTTCTTATCAGCTGGAGATGCCITTCAGCGTGATCTGCCCTTACAGT	960
Db	994	TCAATACAGACTTTTCTTATCAGCTGGAGATGCCITTCAGCGTGATCTGCCCTTACAGT	1053
Qy	961	GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGACGTGTGAAGATAAAAGAGAGCACTGC	1020
Db	1054	GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGACGTGTGAAGATAAAAGAGAGCACTGC	1113
Qy	1021	GTCCTTTTGAATAAAGGCGAGACAAAGAGAAAGAGAGTCACTTTACCCAGCATATA	1080
Db	1114	GTCCTTTTGAATAAAGGCGAGACAAAGAGAAAGAGAGTCACTTTACCCAGCATATA	1173

[illegible]

; GENERAL INFORMATION:
; APPLICANT: CARIGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 693
; LENGTH: 3274
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-741-600-693

Query Match 98.9%; Score 2070.6; DB 22; Length 3274;
Best Local Similarity 98.8%; Pred. No. 0;
Matches 2072; Conservative 21; Mismatches 0; Indels 4; Gaps 1;
Qy 1 ATGAGGAGGTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 112 ATGAGGAGGTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATYGCAGAA 171
Qy 61 GAAATGTGTAGCAAGCTGTGTATCATGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 172 GAAATRTGTAGCAAGCTGTGTATCATGATTTTCTGCAGATCTTCACTGTATTAGTGAA 231
Qy 121 TCCGATAGTATGACCTAAAAACCGAAACAGCTCTCTTGTGTGTGTGTCTTACCCAG 180
Db 232 TCCGATAGTATGACCTAAAAACCGAAACAGCTCTCTTGTGTGTGTGTCTTACCCAG 291
Qy 181 GGCACCGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 292 GGCACCGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 351
Qy 241 CTGCGGTGATTTCTTTGCTCACTCGCGGTATGCGTTACTGGGTCTCGGTGATTCAGAA 300
Db 352 CTGCGGTGATTTCTTTGCTCACTCGCGGTATGCGTTACTGGGTCTCGGTGATTCAGAA 411
Qy 301 TACACCTACTTTTGCATGGGGGAGATATTTGATTAACAGACTTCAAGAGCTTGGAGCC 360
Db 412 TACACCTACTTTTGCATGGGGGAGATATTTGATTAACAGACTTCAAGAGCTTGGAGCC 471
Qy 361 CGGCATTTCTATGACACTGACATGACATGATGATGATTTAGAACTTGTGTTGAG 420
Db 472 CGGCATTTCTATGACACTGACATGACATGATGATGATTTAGAACTTGTGTTGAG 531
Qy 421 CCGTGGATTGTGGACTCTGGCAGCCCTCAGAAAGCAATTTTGTAGTCAAGCAGAGCAAA 480
Db 532 CCGTGGATTGTGGACTCTGGCAGCCCTCAGAAAGCAATTTTGTAGTCAAGCAGAGCAAA 591
Qy 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACCTGCATCTTGGAGCAGACACCTTGT 540
Db 592 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACCTGCATCTTGGAGCAGACACCTYGTG 651
Qy 541 AAGTCAGAGCTGCTACATTTGAATCTCAAGTCGAGCTTCTGAGATTGATGATTCAGGA 600
Db 652 AAGTCAGAGCTGCTACATTTGAATCTCAAGTCGAGCTTCTGAGATTGATGATTCAGGA 711
Qy 601 AGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCCAATGTTGA 660
Db 712 AGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCCAATGTTGA 771
Qy 661 ATTGAAGACTTTGAGTCTCACTTACCGTTCCGTTACCCCACTCTCAAGCCCTCTCTG 720
Db 772 ATTGAAGACTTTGAGTCTCACTTACCGTTCCGTTACCCCACTCTCAAGCCCTCTCTG 831
Qy 721 AATATCTGTTTACCCCGAGAAATTTAGAGGTACATCTCGAGAGTCTCTTGGCCAG 780
Db 832 AATATCTGTTTACCCCGAGAAATTTAGAGGTACATCTCGAGAGTCTCTTGGCCAG 891
Qy 781 GAGGAAAGCCAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCATTTTCAAG 840
Db 840 GAGGAAAGCCAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCATTTTCAAG

Db 892 GAGGAAAGCCAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 951
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATATAAAACCACTCTGCTGGTAGAATTCGACATT 900
Db 952 GCAGTTCAACTTACTACGAATGATGCCATATAAAACCACTCTGCTGGTAGAATTCGACATT 1011
Qy 901 TCAATACAGACTTTTCTCTATCAGCTTGGAGATGCCCTTTCAGCAGTGTCTGCGCTTAAACAGT 960
Db 1012 TCAATACAGACTTTTCTCTATCAGCTTGGAGATGCCCTTTCAGCAGTGTCTGCGCTTAAACAGT 1071
Qy 961 GATTCTGAGGTACAAAGCCTACTCCAAAGACTGTCAGCTTGAAGATAAAAGAGAGACCTGTC 1020
Db 1072 GATTCTGAGGTACAAAGCCTACTCCAAAGACTGTCAGCTTGAAGATAAAAGAGAGACCTGTC 1131
Qy 1021 GTCTTTTGAATAAAGGCGACACAAAGAGAAAGAGGCTACTTACCCTCCAGCATATA 1080
Db 1132 GTCTTTTGAATAAAGGCGACACAAAGAGAAAGAGGCTACTTACCCTCCAGCATATA 1191
Qy 1081 CTTGCGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1192 CTTGCGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1251
Qy 1141 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATACCAAGTGTGAGTGTGAAAGGCGCAGG 1200
Db 1252 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATACCAAGTGTGAGTGTGAAAGGCGCAGG 1311
Qy 1201 CTACAGAGCTGTGCAGTAAACAGGGGCGACCGCATATAGCCGCTTGTACGAGATGCC 1260
Db 1312 CTACAGAGCTGTGCAGTAAACAGGGGCGACCGCATATAGCCGCTTGTACGAGATGCC 1371
Qy 1261 TGTGCTGCTTGTGTGGATCTCTCTGCTTCCCTTCCCTTCCAGCCACCACTCAGTCTC 1320
Db 1372 TGTGCTGCTTGTGTGGATCTCTCTGCTTCCCTTCCCTTCCAGCCACCACTCAGTCTC 1431
Qy 1321 CTGCTCGAACTCTTCTTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1432 CTGCTCGAACTCTTCTTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1491
Qy 1381 TTTCAACCCAGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTCTACTGCCACA 1440
Db 1492 TTTCAACCCAGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTCTACTGCCACA 1551
Qy 1441 ACAGAGTTCTGCGAAGGAGTATGTACAGCTGGCTGGCTTGTGTGTTGCTTCAAGTT 1500
Db 1552 ACAGAGTTCTGCGAAGGAGTATGTACAGCTGGCTGGCTTGTGTGTTGCTTCAAGTT 1611
Qy 1501 CTTCAGCCAAACATACATGCTATCCCATGAAGACAGAGAGAGAGAGAGAGAGAGAGAGAG 1560
Db 1612 CTTCAGCCAAACATACATGCTATCCCATGAAGACAGAGAGAGAGAGAGAGAGAGAGAG 1671
Qy 1561 TCCATCTCTCTCGAAGCAAAATTTCTTCCACTTACAGATGAGCCCTCAATCCCAATC 1620
Db 1672 TCCATCTCTCTCGAAGCAAAATTTCTTCCACTTACAGATGAGCCCTCAATCCCAATC 1731
Qy 1621 ATAATGTTGGGTTCAGAGAACCGGATAGCCCGTTTATTTGGGTTCCTTCAACAT --- AG 1676
Db 1732 ATAATGTTGGGTTCAGAGAACCGGATAGCCCGTTTATTTGGGTTCCTTCAACATAGAGAG 1791
Qy 1677 AAACTCCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTGTTTGTGCTGCTG 1736
Db 1792 AAACTCCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTGTTTGTGCTGCTG 1851
Qy 1737 AGGCATAGGATAGGATTTCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1796
Db 1852 AGGCATAGGATAGGATTTCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1911
Qy 1797 ATCTTAACTCATCTAAAGTTTCTTCTCAAGAGATGCTTCTTGGGAGAGAGAGAGAGAG 1856
Db 1912 ATCTTAACTCATCTAAAGTTTCTTCTCAAGAGATGCTTCTTGGGAGAGAGAGAGAG 1971
Qy 1857 CCAGCAAAAGTATGTACAAGACAAATCCAGCTTTCAGCCAGAGAGAGAGAGAGAGAGAG 1916
Db 1972 CCAGCAAAAGTATGTACAAGACAAATCCAGCTTTCAGCCAGAGAGAGAGAGAGAGAGAG 2031

QY 1917 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAATATGGCCAAAGATGTA 1976
Db 2032 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAATATGGCCAAAGATGTA 2091
QY 1977 CATGATGCCCTTGTGCAATATATAGCAAGAGGTTGGAGTTGAAAACCTAGAAGCAATG 2036
Db 2092 CATGATGCCCTTGTGCAATATATAGCAAGAGGTTGGAGTTGAAAACCTAGAAGCAATG 2151
QY 2037 AAAACCTGGCCACTTTAAAGAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2093
Db 2152 AAAACCTGGCCACTTTAAAGAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2208

RESULT 14

US-09-371-347-45
; Sequence 45, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-45

Query Match 98.6%; Score 2063; DB 10; Length 2094;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 2090; Conservative 0; Mismatches 0; Indels 7; Gaps 2;

QY 1 ATGAGGAGTTTCTGTTACTATATGCTACAGCAGGAGGACAGGCAAGGCCATTCGAGAA 60
Db 1 ATGAGGAGTTTCTGTTACTATATGCTACAGCAGGAGGACAGGCAAGGCCATTCGAGAA 60
QY 61 GAAATGTGTAGCAAGCTGTGTATCATGATTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 61 GAAATGTGTAGCAAGCTGTGTATCATGATTTCTGCAGATCTTCACTGTATTAGTGAA 120
QY 121 TCCGATAAGTATGACCTAAACCCGAAACAGCTCCTCTTTGTTGTTGTTCTACACG 180
Db 121 TCCGATAAGTATGACCTAAACCCGAAACAGCTCCTCTTTGTTGTTGTTCTACACG 180
QY 181 GGCACCGGAGACCCACCCGACACAGCCGCAAGTTGTTAAGGAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCCGACACAGCCGCAAGTTGTTAAGGAATACAGAACCAACA 240
QY 241 CTGCGGTTGATTTCTTCTCCTCCTGCTGATGGGTTACTGGGTCCTGGTGTTCAGAA 300
Db 241 CTGCGGTTGATTTCTTCTCCTCCTGCTGATGGGTTACTGGGTCCTGGTGTTCAGAA 300
QY 301 TACACTACTTTTGGCAATGGGGGAAGATATTTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACTACTTTTGGCAATGGGGGAAGATATTTGATAAACGACTTCAAGAGCTTGGAGCC 360
QY 361 CGGCAATTTATGACATCGGACATGTCAGATGATCTGTAGGTTTAGAACTTGTGGTTGAG 420
Db 361 CGGCAATTTATGACATCGGACATGTCAGATGATCTGTAGGTTTAGAACTTGTGGTTGAG 420
QY 421 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 421 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480

QY 481 GAGAGATTAAGTGGCGCATCTCCCGTGGCATCACTGTCATCTTGTAGGACAGACCTTGTG 540
Db 481 GAGAGATTAAGTGGCGCATCTCCCGTGGCATCACTGTCATCTTGTAGGACAGACCTTGTG 540
QY 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGA 600
QY 601 AGAAAGGATTTCTGAGGTTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCAATGTTGTA 660
Db 601 AGAAAGGATTTCTGAGGTTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCAATGTTGTA 660
QY 661 ATTGAAGACTTTGAGTCTCTCACTTACCCGTTGGTACCCCACTCTCAAGCCCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCCGTTGGTACCCCACTCTCAAGCCCTCTCTG 720
QY 721 AATATTCTGTTTACCCCGAATATTTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCTGTTTACCCCGAATATTTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
QY 781 GAGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTCCCAATTTCAAAG 840
Db 781 GAGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTCCCAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTAGCAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATT 900
Db 841 GCAGTTCAACTTACTAGCAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATT 900
QY 901 TCAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTGTACGCTTAAACAGT 960
Db 901 TCAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTGTACGCTTAAACAGT 960
QY 961 GATTCTGAGGTACAAAGCTTACTCAAAGCTGTCAGCTTGAAGATAAAAGAGAGACATGC 1020
Db 961 GATTCTGAGGTACAAAGCTTACTCAAAGCTGTCAGCTTGAAGATAAAAGAGAGACATGC 1020
QY 1021 GTCTTTTGAATAAAGGACACACAAAGAAAGAGAGCTACTCTTACCCAGCATATA 1080
Db 1021 GTCTTTTGAATAAAGGACACACAAAGAAAGAGAGCTACTCTTACCCAGCATATA 1080
QY 1081 CCTCGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1081 CCTCGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
QY 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACTATACAGTGTACAGTGTGAAAAGCGCAGG 1200
Db 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACTATACAGTGTACAGTGTGAAAAGCGCAGG 1200
QY 1201 CTACAGGAGCTGTGAGTAAACAAAGGGGAGCCGATTTATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGAGTAAACAAAGGGGAGCCGATTTATAGCCGCTTTGTACGAGATGCC 1260
QY 1261 TGTGCTGTGTTTGGATCTCTCTGCTTTTCCCTTCTTCCGAGCCACCACTAGATCTC 1320
Db 1261 TGTGCTGTGTTTGGATCTCTCTGCTTTTCCCTTCTTCCGAGCCACCACTAGATCTC 1320
QY 1321 CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTCGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTCGTCGCAAGCTCAAGTTTA 1380
QY 1381 TTTTCCACGAGAAAGCTTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTCCACGAGAAAGCTTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
Db 1441 ACAGAGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
QY 1501 CTTTCAGCAACATACATGATCCCATGACAGACGCGGAAAGCCCTGGCTCCTTAAGATA 1560
Db 1501 CTTTCAGCAACATACATGATCCCATGACAGACGCGGAAAGCCCTGGCTCCTTAAGATA 1560

Qy 1561 TCCATCTCTCCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
Db 1561 TCCATCTCTCCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
Qy 1621 ATAAATGTGGGTTCAGGAACCGGATAGCCCGTTTATTGGGTTTCTTCAACAT- ---AG 1676
Db 1621 ATAAATGTGGGTTCAGGAACCGGATAGCCCGTTTATTGGGTTTCTTCAACATAGAGAG 1680
Qy 1677 AAATCCAGNACAAACACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTGGCTGC 1736
Db 1681 AAATCCAGNACAAACACCCAGATGGAATTTTGGAGCAATGTG- ---GTTTTTGGCTGC 1737
Qy 1737 AGGATAAGGATAGGGATTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1796
Db 1738 AGGATAAGGATAGGGATTATCTATTCAAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1797
Qy 1797 ATCTTAATCTCATCTAAAGTTTCTCTTCAAGAGATGCTCTGTGGGGAGGAGGAAGCC 1856
Db 1798 ATCTTAATCTCATCTAAAGTTTCTCTTCAAGAGATGCTCTGTGGGGAGGAGGAAGCC 1857
Qy 1857 CCAGCAAGTATGTACAGACAAACATCCAGCTTATGGCCAGAGGTGGCGAGATCCTC 1916
Db 1858 CCAGCAAGTATGTACAGACAAACATCCAGCTTATGGCCAGAGGTGGCGAGATCCTC 1917
Qy 1917 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1976
Db 1918 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1977
Qy 1977 CATGATGCCCTTGTGCAAAATTAAGCAAGAGGTGGAGTTGAAAACTAGAAGCAATG 2036
Db 1978 CATGATGCCCTTGTGCAAAATTAAGCAAGAGGTGGAGTTGAAAACTAGAAGCAATG 2037
Qy 2037 AAAACCTGGCCACTTTAAAGAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2093
Db 2038 AAAACCTGGCCACTTTAAAGAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2094

RESULT 15

US-11-119-096-45
; Sequence 45, Application US/11119096
; Publication No. US2005019101A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima,
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; PRIOR FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-45

Query Match 98.6%; Score 2063; DB 26; Length 2094;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 2090; Conservative 0; Mismatches 0; Indels 7; Gaps 2;

Qy 1 ATGAGGAGGTTTCTGTCTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTCTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 60
Qy 61 GAAATGTTGAGCAAGCTGTGGTACATPGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 61 GAAATGTTGAGCAAGCTGTGGTACATPGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Qy 121 TCCGATTAAGTATGACCTTAAAAACCGRAACAGCTCTCTTCTGTGTGGTGTCTTACCACG 180
Db 121 TCCGATTAAGTATGACCTTAAAAACCGRAACAGCTCTCTTCTGTGTGGTGTCTTACCACG 180
Qy 181 GGCACCGGAGACCCACCCGACACAGACCCGCAAGTTTCTTAAGGAAATACAGAAACCAACA 240
Db 181 GGCACCGGAGACCCACCCGACACAGACCCGCAAGTTTCTTAAGGAAATACAGAAACCAACA 240
Qy 241 CTGCCGGTTGATTTTCTTGTCTCACCTCGGATATGGGTTCCTGGGTCTCGGTGATTCAAG 300
Db 241 CTGCCGGTTGATTTTCTTGTCTCACCTCGGATATGGGTTCCTGGGTCTCGGTGATTCAAG 300
Qy 301 TACACCTACTTTTGCATGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Qy 361 CGGCATTTCTATGACACTGGACATGACATGCTGTAGGTTTAGAATCTTGTGTTGAG 420
Db 361 CGGCATTTCTATGACACTGGACATGACATGCTGTAGGTTTAGAATCTTGTGTTGAG 420
Qy 421 CCCTGGAATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db 421 CCCTGGAATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Qy 481 GAGGAGATTAAGTGGCGCACTCCCGGTGGCATCACTGCATCCTTGAGGACAGACTTGTG 540
Db 481 GAGGAGATTAAGTGGCGCACTCCCGGTGGCATCACTGCATCCTTGAGGACAGACTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTCGATGATTCAAGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTCGATGATTCAAGA 600
Qy 601 AGAAAGGATTTCTGAGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGA 660
Db 601 AGAAAGGATTTCTGAGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGA 660
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTCCGTTACCCCACTCTCACAGCCCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTCCGTTACCCCACTCTCACAGCCCTCTG 720
Qy 721 AATATTCCTGGTTTACCCCAAGATAATTTACAGGTACATCTGCAGAGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGGTTTACCCCAAGATAATTTACAGGTACATCTGCAGAGAGTCTCTTGGCCAG 780
Qy 781 GAGGAAAGCCCAAGTATCTGTGACTTCAAGTCCAGTCCAGTCCCAATTTCAAAG 840
Db 781 GAGGAAAGCCCAAGTATCTGTGACTTCAAGTCCAGTCCAGTCCCAATTTCAAAG 840
Qy 841 GCAGTTCAACTTACTACGAATGATCCATAAAACCACTCTGCTGTTAGATTTGGACATT 900
Db 841 GCAGTTCAACTTACTACGAATGATCCATAAAACCACTCTGCTGTTAGATTTGGACATT 900
Qy 901 TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTATCTGCGCTTAAACAGT 960
Db 901 TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTATCTGCGCTTAAACAGT 960
Qy 961 GATTCGAGGTACAAAGCCTACTCCAAAGACTGAGCTTGAAGATAAAAGAGAGCACTGC 1020
Db 961 GATTCGAGGTACAAAGCCTACTCCAAAGACTGAGCTTGAAGATAAAAGAGAGCACTGC 1020
Qy 1021 GTCCTTTGAAAAATAAAGGCGAGACAAAGAGAGGAGCTTACCTTACCCAGCATATA 1080
Db 1021 GTCCTTTGAAAAATAAAGGCGAGACAAAGAGAGGAGCTTACCTTACCCAGCATATA 1080
Qy 1081 CCTCGGGATGTTCTCTCCAGTTTCACTTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140

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